

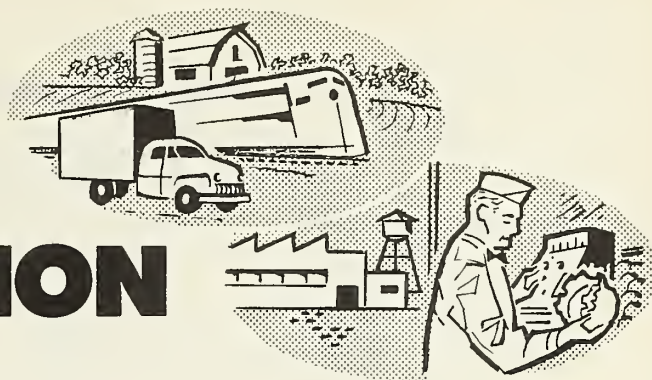
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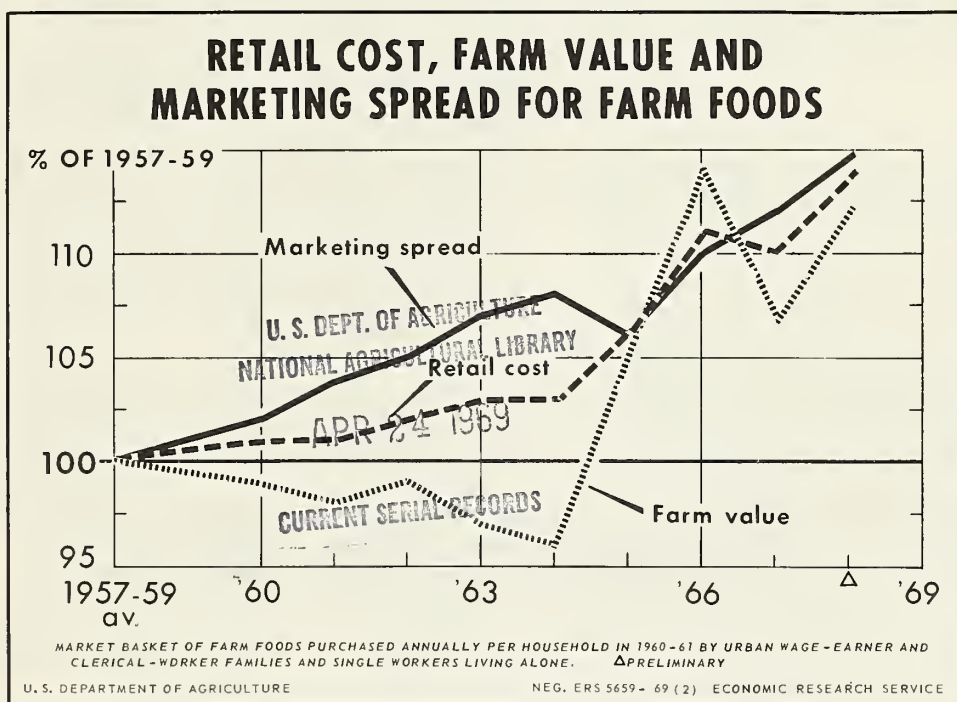
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# MARKETING and TRANSPORTATION SITUATION



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## STATISTICAL SUMMARY OF MARKET INFORMATION

| Item  | Unit or<br>base period | 1967  |           | 1968  |            |           |
|---|------------------------|-------|-----------|-------|------------|-----------|
|   |                        | Year  | Oct.-Dec. | Year  | July-Sept. | Oct.-Dec. |
| <u>Farm-to-retail price spreads</u>                                     |                        |       |           |       |            |           |
| Farm-food market basket: 1/   |                        |       |           |       |            |           |
| Retail cost.....  | Dol.                   | 1,080 | 1,083     | 1,118 | 1,128      | 1,128     |
| Farm value.....   | Dol.                   | 414   | 407       | 434   | 444        | 433       |
| Farm-retail spread.....   | Dol.                   | 666   | 676       | 684   | 684        | 695       |
| Farmer's share of retail cost.....                                      | Pct.                   | 38    | 38        | 39    | 39         | 38        |
| <u>General economic indicators</u>                                      |                        |       |           |       |            |           |
| Consumer's per capita income and<br>expenditures: 2/                    |                        |       |           |       |            |           |
| Disposable personal income.....   | Dol.                   | 2,744 | 2,798     | 2,928 | 2,942      | 2,982     |
| Expenditures for goods and services..                                   | Dol.                   | 2,472 | 2,511     | 2,653 | 2,686      | 2,704     |
| Expenditures for food.....  | Dol.                   | 477   | 481       | 503   | 507        | 511       |
| Expenditures for food as percentage<br>of disposable income.....        | Pct.                   | 17.2  | 17.2      | 17.2  | 17.2       | 17.1      |
|   |                        |       |           |       |            |           |
|   |                        | 1967  |           | 1968  |            |           |
|   |                        | Year  | Dec.      | Oct.  | Nov.       | Dec.      |
| Hourly earnings of employees, private<br>nonagricultural sector 3/..... | Dol.                   | 2.67  | 2.73      | 2.92  | 2.92       | 2.93      |
| Hourly earnings of food marketing<br>employees 4/.....                  | Dol.                   | 2.52  | 2.57      | 2.70  | 2.73       | 2.74      |
| Retail sales: 5/  |                        |       |           |       |            |           |
| Food stores.....  | Mil. Dol.              | 6,011 | 5,920     | 6,133 | 6,274      | 6,133     |
| Apparel stores.....   | Mil. Dol.              | 1,509 | 1,473     | 1,634 | 1,674      | 1,555     |
| Manufacturers' inventories: 5/  |                        |       |           |       |            |           |
| Food and kindred products.....  | Mil. Dol.              | 7,094 | 7,094     | 7,491 | 7,457      | 7,372     |
| Textile mill products.....  | Mil. Dol.              | 3,232 | 3,232     | 3,470 | 3,425      | 3,517     |
| Tobacco products.....   | Mil. Dol.              | 2,269 | 2,269     | 2,211 | 2,236      | 2,261     |
| Indexes of industrial production: 6/                                    |                        |       |           |       |            |           |
| Food manufactures.....  | 1957-59=100            | 130.1 | 130.5     | 131.6 | 130.0      | --        |
| Textile mill products.....  | 1957-59=100            | 142.2 | 151.9     | 153.2 | 154.9      | --        |
| Apparel products.....   | 1957-59=100            | 147.7 | 150.9     | 150.8 | --         | --        |
| Tobacco products.....   | 1957-59=100            | 120.0 | 120.5     | 120.8 | --         | --        |
| Index of physical volume of farm<br>marketings.....                     | 1957-59=100            | 124   | 137       | 182   | 173        | 144       |
| <u>Price indexes</u>  |                        |       |           |       |            |           |
| Consumer price index 7/.....  | 1957-59=100            | 116.3 | 118.2     | 122.9 | 123.4      | 123.7     |
| Wholesale prices of food 8/.....  | 1957-59=100            | 108.6 | 109.1     | 112.3 | 113.5      | 113.8     |
| Wholesale prices of cotton products 7/:                                 | 1957-59=100            | 100.7 | 104.2     | 105.3 | 105.4      | 105.1     |
| Wholesale prices of woolen products 7/:                                 | 1957-59=100            | 103.2 | 102.2     | 104.7 | 104.6      | 104.6     |
| Prices received by farmers.....   | 1957-59=100            | 104   | 105       | 108   | 108        | 108       |
| Prices paid by farmers, interest,<br>taxes, and wage rates.....         | 1957-59=100            | 117   | 117       | 122   | 123        | 123       |

1/ Contains average quantities of farm-originated foods purchased annually per household in 1960-61 by wage-earner and clerical-worker families and single workers living alone. Estimates of the farmer's share do not allow for direct Federal payments to producers, except for the value of wheat marketing certificates. 2/ Seasonally adjusted annual rates, calculated from Dept. of Commerce data. Percentages have been calculated from total income and expenditure data. 3/ Average hourly earnings of production workers in mining and manufacturing; construction workers in contract construction; nonsupervisory workers in wholesale and retail trade, finance, insurance, real estate, transportation, public utilities and services, Dept. of Labor. 4/ Weighted composite earnings in food processing, wholesale trade, retail food stores, calculated from data of Dept. of Labor. 5/ Seasonally adjusted, Dept. of Commerce. Sales data for 1967 are averages of monthly totals (unadjusted). Inventory data for 1967 are book values at end of year (adjusted). 6/ Seasonally adjusted, Board of Governors of Federal Reserve System. 7/ Dept. of Labor, 8/ Fresh and dried fruits and vegetables, eggs, and processed foods; Dept. of Labor.

# MARKETING AND TRANSPORTATION SITUATION

Approved by the Outlook and Situation Board, February 11, 1969

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## SUMMARY \*

After rising sharply in each of the first 3 quarters of 1968, the retail cost of a market basket of farm-originated food leveled in the fourth quarter. Even with the slowdown, however, fourth quarter retail costs were up 4.2 percent from a year earlier.

Returns to farmers (farm value) for market-basket foods dropped 2.5 percent from the third to the fourth quarter. Decreased prices for hogs, frying chickens, and citrus fruits more than offset increases for eggs and some fresh vegetables. Returns to farmers for market-basket foods in the fourth quarter averaged 6.4 percent above a year earlier because of increases in the first 3 quarters.

The marketing system absorbed the drop in the farm value of market-basket foods from the third to the fourth quarter last year. Spreads between retail prices and farm values of these foods, after remaining stable during the first half of 1968, averaged 1.6 percent wider in the fourth quarter than in the third and averaged 2.8 percent wider than a year earlier.

Rising consumer demand, spurred by increased personal incomes, boosted prices consumers paid for market-basket foods to a record level in 1968. Marketing spreads and prices received by farmers both increased.

Increases in the market basket for 1968 included:

- \*\*Wider marketing spreads, by 2.6 percent or \$18,
- \*\*Increased farm value, by 4.9 percent or \$20,
- \*\*Higher retail cost, by 3.5 percent or \$38,
- \*\*Bigger farmer's share of the market-basket food dollar, up 1 cent to 39 cents.

At the same time, per capita disposable income rose almost 7 percent, and average hourly earnings of food marketing employees were up 6 percent.

The farm value of foods in the market basket in 1969 is not expected to change much from the level of the final quarter of 1968. The farm-retail spread for foods in the market basket likely will continue to widen this year, particularly in the latter half of the year. Operating costs of food marketing firms will average higher than in 1968. As a result, the retail cost of the market basket is expected to rise again in 1969 but at a slower rate than the 3.5 percent rise from 1967 to 1968.

\*The summary of this report and a summary table were released to the press on February 11, 1969.



## FARM-FOOD MARKET BASKET STATISTICS

### Fourth Quarter 1968

Retail Cost: Following sharp increases in each of the first 3 quarters of the year, retail food costs leveled off in the fourth quarter of 1968. Consumers paid an average of \$1,128 (annual rate) for the market basket of farm foods in the fourth quarter--about the same as in the previous quarter (table 1). <sup>1/</sup> Because of the increases earlier in the year, however, retail costs in the final quarter of 1968 were 4.2 percent higher than a year earlier.

Retail prices of some foods were erratic during the fourth quarter. Unusually sharp increases for eggs and a few other foods were almost offset by seasonally declining prices for poultry and fresh fruit. The total retail cost for market-basket foods varied sharply within the quarter--up in October, down in November, and up again in December (table 2).

Farm Value: The farm value of foods in the market basket was \$433 (annual rate) in the fourth quarter--2.5 percent lower than in the preceding quarter when it was highest for the year. Lower prices for hogs, frying chickens, and citrus fruits more than offset higher prices for eggs and some fresh vegetables.

Despite the decline from the previous quarter--largely seasonal--returns to farmers for market-basket foods in the final quarter of 1968 were up 6.4 percent from the fourth quarter of 1967. Prices received by farmers for most major products were higher; prices for wheat and soybeans declined.

Farm-Retail Spread: The marketing system absorbed the fourth-quarter decline in returns to farmers from market-basket foods. After staying relatively stable during the first half of 1968, the spread between the retail cost and the farm value of the market basket of farm foods increased sharply in the second half. In the fourth quarter, it was 1.6 percent wider than in the third quarter and 2.8 percent wider than a year earlier.

Meat products contributed most to the widening marketing spreads from the third to the fourth quarter. As often happens, changes in the retail prices of meat lagged behind changes in farm prices of meat animals.

Farmer's Share: Farmers received an average of 38 cents of each dollar consumers spent for market-basket foods in the fourth quarter last year--1 cent less than in the previous quarter, but the same as in the fourth quarter of 1967.

### Market Basket Review of 1968

Retail Cost: Widening marketing spreads and rising prices received by farmers both contributed to record high retail prices for market-basket foods in 1968. This reversed a slight decline in the previous year. Market-basket foods cost consumers a record \$1,118 last year--up 3.5 percent from 1967 (table 3). Although fruits and vegetables accounted for half of this increase, retail prices increased for all product groups except fats and oils.

<sup>1/</sup> The market basket contains the average quantities of domestic, farm-originated food products purchased annually per household in 1960 and 1961 by wage-earner and clerical-worker families and single workers living alone. Its retail cost is calculated from retail prices published by the Bureau of Labor Statistics. The retail cost of the market basket foods is less than the cost of all foods bought per household, since it does not include costs of meals in eating places, imported foods, seafoods or other foods not of farm origin. The farm value is the return to farmers for the farm products equivalent to foods in the market basket. The farm-retail spread is the difference between the retail cost and farm value. It is an estimate of total gross margin received by marketing firms for assembling, processing, transporting, and distributing the products in the market basket.

Table 1.-- The market basket of farm foods: Retail cost, farm value, and farm-retail spread, October-December 1968, July-September 1968 and October-December 1967

| Item                                    | October-<br>December<br>1968 | July-<br>September<br>1968 | October-<br>December<br>1967 | Change: October-December 1968 from: |       |                          |      |
|---|------------------------------|----------------------------|------------------------------|-------------------------------------|-------|--------------------------|------|
|   |                              |                            |                              | July-September<br>1968              |       | October-December<br>1967 |      |
|   | Dol.                         | Dol.                       | Dol.                         | Dol.                                | Pct.  | Dol.                     | Pct. |
| Retail cost <sup>1/</sup>               |                              |                            |                              |                                     |       |                          |      |
| Market basket .....                     | 1,128.30                     | 1,128.21                   | 1,083.09                     | 0.09                                | 2/    | 45.21                    | 4.2  |
| Meat products .....                     | 327.43                       | 327.30                     | 320.30                       | .13                                 | 2/    | 7.13                     | 2.2  |
| Dairy products .....                    | 204.98                       | 203.19                     | 197.18                       | 1.79                                | .9    | 7.80                     | 4.0  |
| Poultry .....                           | 47.50                        | 48.76                      | 45.06                        | -1.26                               | -2.6  | 2.44                     | 5.4  |
| Eggs .....                              | 44.08                        | 39.66                      | 34.90                        | 4.42                                | 11.1  | 9.18                     | 26.3 |
| Bakery and cereal :<br>products .....   | 171.14                       | 170.20                     | 168.93                       | .94                                 | .6    | 2.21                     | 1.3  |
| Fresh fruits .....                      | 51.00                        | 57.92                      | 45.41                        | -6.92                               | -11.9 | 5.59                     | 12.3 |
| Fresh vegetables ..                     | 70.90                        | 70.25                      | 65.75                        | .65                                 | .9    | 5.15                     | 7.8  |
| Processed fruits :<br>and vegetables .. | 123.64                       | 123.83                     | 118.52                       | -.19                                | -.2   | 5.12                     | 4.3  |
| Fats and oils .....                     | 37.92                        | 37.90                      | 38.38                        | .02                                 | .1    | -.46                     | -1.2 |
| Miscellaneous :<br>products .....       | 49.71                        | 49.20                      | 48.66                        | .51                                 | 1.0   | 1.05                     | 2.2  |
| Farm value <sup>3/</sup>                |                              |                            |                              |                                     |       |                          |      |
| Market basket .....                     | 432.82                       | 443.79                     | 406.83                       | -10.97                              | -2.5  | 25.99                    | 6.4  |
| Meat products .....                     | 168.51                       | 181.16                     | 161.42                       | -12.65                              | -7.0  | 7.09                     | 4.4  |
| Dairy products .....                    | 98.17                        | 97.20                      | 94.20                        | .97                                 | 1.0   | 3.97                     | 4.2  |
| Poultry .....                           | 22.30                        | 24.48                      | 20.24                        | -2.18                               | -8.9  | 2.06                     | 10.2 |
| Eggs .....                              | 28.22                        | 25.45                      | 19.90                        | 2.77                                | 10.9  | 8.32                     | 41.8 |
| Bakery and cereal :<br>products .....   | 32.36                        | 32.21                      | 33.55                        | .15                                 | .5    | -1.19                    | -3.5 |
| Fresh fruits .....                      | 16.26                        | 18.13                      | 14.98                        | -1.87                               | -10.3 | 1.28                     | 8.5  |
| Fresh vegetables ..                     | 23.25                        | 21.28                      | 20.58                        | 1.97                                | 9.3   | 2.67                     | 13.0 |
| Processed fruits :<br>and vegetables .. | 24.91                        | 25.33                      | 22.52                        | -.42                                | -1.7  | 2.39                     | 10.6 |
| Fats and oils .....                     | 9.38                         | 9.19                       | 10.14                        | .19                                 | 2.1   | -.76                     | -7.5 |
| Miscellaneous :<br>products .....       | 9.46                         | 9.36                       | 9.30                         | .10                                 | 1.1   | .16                      | 1.7  |
| Farm-retail spread                      |                              |                            |                              |                                     |       |                          |      |
| Market basket .....                     | 695.48                       | 684.42                     | 676.26                       | 11.06                               | 1.6   | 19.22                    | 2.8  |
| Meat products .....                     | 158.92                       | 146.14                     | 158.88                       | 12.78                               | 8.7   | .04                      | 2/   |
| Dairy products .....                    | 106.81                       | 105.99                     | 102.98                       | .82                                 | .8    | 3.83                     | 3.7  |
| Poultry .....                           | 25.20                        | 24.28                      | 24.82                        | .92                                 | 3.8   | .38                      | 1.5  |
| Eggs .....                              | 15.86                        | 14.21                      | 15.00                        | 1.65                                | 11.6  | .86                      | 5.7  |
| Bakery and cereal :<br>products .....   | 138.78                       | 137.99                     | 135.38                       | .79                                 | .6    | 3.40                     | 2.5  |
| Fresh fruits .....                      | 34.74                        | 39.79                      | 30.43                        | -5.05                               | -12.7 | 4.31                     | 14.2 |
| Fresh vegetables ..                     | 47.65                        | 48.97                      | 45.17                        | -1.32                               | -2.7  | 2.48                     | 5.5  |
| Processed fruits :<br>and vegetables .. | 98.73                        | 98.50                      | 96.00                        | .23                                 | .2    | 2.73                     | 2.8  |
| Fats and oils .....                     | 28.54                        | 28.71                      | 28.24                        | -.17                                | -.6   | .30                      | 1.1  |
| Miscellaneous :<br>products .....       | 40.25                        | 39.84                      | 39.36                        | .41                                 | 1.0   | .89                      | 2.3  |

<sup>1/</sup> Retail cost of average quantities purchased annually per household in 1960-61 by urban wage-earner and clerical-worker families and single workers living alone, calculated from retail prices collected by the Bureau of Labor Statistics.

<sup>2/</sup> Less than 0.05 percent.

<sup>3/</sup> Payment to farmer for equivalent quantities of farm products minus imputed value of byproducts obtained in processing.

Table 2.--The market basket of farm foods: Retail cost, farm value, farm-retail spread, and farmer's share of retail cost, averages 1947-49 and 1957-59, annual 1958-68, monthly 1967-68 1/

| Year and month       | Retail cost    | Farm value     | Farm-retail spread | Farmer's share |
|----------------------|----------------|----------------|--------------------|----------------|
|                      | <u>Dollars</u> | <u>Dollars</u> | <u>Dollars</u>     | <u>Percent</u> |
| Average:             |                |                |                    |                |
| 1947-49 .....        | 890            | 441            | 449                | 50             |
| 1957-59 .....        | 983            | 388            | 595                | 39             |
| 1958 .....           | 1,009          | 407            | 602                | 40             |
| 1959 .....           | 985            | 377            | 608                | 38             |
| 1960 .....           | 991            | 383            | 608                | 39             |
| 1961 .....           | 997            | 380            | 617                | 38             |
| 1962 .....           | 1,006          | 384            | 622                | 38             |
| 1963 .....           | 1,013          | 374            | 639                | 37             |
| 1964 .....           | 1,014          | 374            | 640                | 37             |
| 1965 .....           | 1,038          | 408            | 630                | 39             |
| 1966 .....           | 1,095          | 443            | 652                | 40             |
| 1967 .....           | 1,080          | 414            | 666                | 38             |
| 1968 <u>2/</u> ..... | 1,118          | 434            | 684                | 39             |
| <u>1967 3/</u>       |                |                |                    |                |
| January .....        | 1,083          | 419            | 664                | 39             |
| February .....       | 1,074          | 413            | 661                | 38             |
| March .....          | 1,069          | 412            | 657                | 39             |
| April .....          | 1,063          | 400            | 663                | 38             |
| May .....            | 1,064          | 399            | 665                | 38             |
| June .....           | 1,080          | 426            | 654                | 39             |
| July .....           | 1,091          | 434            | 657                | 40             |
| August .....         | 1,098          | 428            | 670                | 39             |
| September ....       | 1,088          | 418            | 670                | 38             |
| October .....        | 1,083          | 410            | 673                | 38             |
| November .....       | 1,080          | 401            | 679                | 37             |
| December .....       | 1,086          | 410            | 676                | 38             |
| <u>1968 2/ 3/</u>    |                |                |                    |                |
| January .....        | 1,098          | 418            | 680                | 38             |
| February .....       | 1,100          | 424            | 676                | 39             |
| March .....          | 1,104          | 431            | 673                | 39             |
| April .....          | 1,110          | 439            | 671                | 40             |
| May .....            | 1,114          | 435            | 679                | 39             |
| June .....           | 1,117          | 435            | 682                | 39             |
| July .....           | 1,124          | 450            | 674                | 40             |
| August .....         | 1,132          | 438            | 694                | 39             |
| September ....       | 1,128          | 443            | 685                | 39             |
| October .....        | 1,132          | 433            | 699                | 38             |
| November .....       | 1,124          | 429            | 695                | 38             |
| December .....       | 1,129          | 436            | 693                | 39             |

1/ Retail cost of average quantities purchased annually per household in 1960-61 by urban wage-earner and clerical-worker families and single workers living alone, calculated from retail prices collected by the Bureau of Labor Statistics. Data for earlier years are published in Farm-Retail Spreads for Food Products 1947-64, ERS-226, April 1965. 2/ Preliminary. 3/ Annual rates.



Table 3.--The market basket of farm foods: Retail cost, farm value, and farm-retail spread, annual 1968 and 1967

| Item                                    | Year                  |          | Change: 1968 from 1967 |            |
|---|-----------------------|----------|------------------------|------------|
|   | 1968                  | 1967     | Actual                 | Percentage |
|   | Dollars               | Dollars  | Dollars                | Percent    |
|   | Retail cost <u>1/</u> |          |                        |            |
| Market basket .....                     | 1,117.71              | 1,079.88 | 37.38                  | 3.5        |
| Meat products .....                     | 324.22                | 317.08   | 7.14                   | 2.3        |
| Dairy products ....                     | 201.96                | 195.65   | 6.31                   | 3.2        |
| Poultry .....                           | 47.83                 | 46.10    | 1.73                   | 3.8        |
| Eggs .....                              | 38.14                 | 35.45    | 2.69                   | 7.6        |
| Bakery and cereal :<br>products .....   | 169.87                | 169.09   | .78                    | .5         |
| Fresh fruits .....                      | 52.91                 | 44.72    | 8.19                   | 18.3       |
| Fresh vegetables ..                     | 72.58                 | 68.52    | 4.06                   | 5.9        |
| Processed fruits :<br>and vegetables .. | 122.97                | 116.20   | 6.77                   | 5.8        |
| Fats and oils ....                      | 38.04                 | 38.79    | -.75                   | -1.9       |
| Miscellaneous :<br>products .....       | 49.19                 | 48.28    | .91                    | 1.9        |
|   | Farm value <u>2/</u>  |          |                        |            |
| Market basket .....                     | 434.36                | 414.06   | 20.30                  | 4.9        |
| Meat products .....                     | 171.76                | 165.59   | 6.17                   | 3.7        |
| Dairy products ....                     | 96.54                 | 93.26    | 3.28                   | 3.5        |
| Poultry .....                           | 23.56                 | 22.27    | 1.29                   | 5.8        |
| Eggs .....                              | 23.40                 | 20.94    | 2.46                   | 11.7       |
| Bakery and cereal :<br>products .....   | 33.04                 | 34.99    | -1.95                  | -5.6       |
| Fresh fruits .....                      | 17.88                 | 13.76    | 4.12                   | 29.9       |
| Fresh vegetables ..                     | 23.85                 | 21.93    | 1.92                   | 8.8        |
| Processed fruits :<br>and vegetables .. | 25.03                 | 21.23    | 3.80                   | 17.9       |
| Fats and oils ....                      | 9.87                  | 11.00    | -1.13                  | -10.3      |
| Miscellaneous :<br>products .....       | 9.43                  | 9.09     | .34                    | 3.7        |
|   | Farm-retail spread    |          |                        |            |
| Market basket .....                     | 683.35                | 665.82   | 17.53                  | 2.6        |
| Meat products .....                     | 152.46                | 151.49   | .97                    | .6         |
| Dairy products ....                     | 105.42                | 102.39   | 3.03                   | 3.0        |
| Poultry .....                           | 24.27                 | 23.83    | .44                    | 1.8        |
| Eggs .....                              | 14.74                 | 14.51    | .23                    | 1.6        |
| Bakery and cereal :<br>products .....   | 136.83                | 134.10   | 2.73                   | 2.0        |
| Fresh fruits .....                      | 35.03                 | 30.96    | 4.07                   | 13.1       |
| Fresh vegetables ..                     | 48.73                 | 46.59    | 2.14                   | 4.6        |
| Processed fruits :<br>and vegetables .. | 97.94                 | 94.97    | 2.97                   | 3.1        |
| Fats and oils ....                      | 28.17                 | 27.79    | .38                    | 1.4        |
| Miscellaneous :<br>products .....       | 39.76                 | 39.19    | .57                    | 1.5        |

1/ Retail cost of average quantities purchased annually per household in 1960/61 by urban wage-earner and clerical-worker families and single workers living alone, calculated from retail prices collected by the Bureau of Labor Statistics.

2/ Payment to farmer for equivalent quantities of farm products minus imputed value of byproducts obtained in processing.

The rise in the retail cost of the market basket foods has accelerated in recent years. Since 1964, the retail cost has risen 10 percent, compared with 3 percent from 1957-59 to 1964 (see cover chart).

Farm Value: The farm value of market-basket foods rose 4.9 percent from 1967 to 1968 (table 3). Farm values were higher for all product groups except the bakery and cereal and fats and oils groups. Increases in prices received by farmers were particularly large for eggs and some fruits and vegetables. These products, together with meat and dairy products, accounted for most of the increase in the total farm value of the market basket.

The farm value of market-basket foods has risen significantly since 1964. It rose in both 1965 and 1966, partly because of reduced supplies of some major food products. After declining in 1967, it increased sharply again in 1968. The increase in farm value in recent years has been caused in part by increased demand spurred by rising consumer incomes.

Farm-Retail Spread: As a result of a sharp increase in the last half of 1968, the spread between the retail cost and farm value of the market basket averaged 2.6 percent wider in 1968 than in 1967. The increase in the farm-retail spread caused about half of the increase in the retail cost of the market basket.

The increase in the spread in 1968 reflected a general increase in operating costs of food marketing firms. Hourly earning of employees in food marketing averaged \$2.67 in 1968--6 percent above 1967. By comparison, hourly earnings increased 5 percent in 1967 and 4 percent in 1966. However, improvements in output per man-hour have cushioned the rise in unit labor cost. Prices of containers, packaging materials, and other goods and services (not including raw materials and labor) also averaged higher in 1968.

After-tax profits of food marketing corporations averaged 2.4 percent of sales in the first 3 quarters of 1968--about the same period of 1967, according to data

compiled by the Federal Trade Commission and Securities and Exchange Commission. After-tax profits of 15 leading retail food chains averaged 1 percent of sales in the first 9 months of 1968--also the same as a year earlier--and equaling the lowest level in 10 years.

Except for 1960 and 1965, the farm-retail spread has increased every year since 1950. However, annual increases in the spread have been smaller so far in the 1960's than in the 1950's--1.3 percent compared with 2.7 percent.

Farmer's Share: Last year's increase in the farm value accounted for about half of the rise in the retail cost of market-basket foods. As a result, the farmer's share of the dollar consumers spent for these foods in retail food stores averaged 39 cents in 1968--1 cent more than in 1967 (table 2). In the 1960's, the annual average farmer's share has ranged from 37 to 40 cents.

#### Commodity Highlights

Pork--Marketing Spreads Widened as Farm Value Dropped in Fourth Quarter: Responding to seasonal increases in commercial hog slaughter, the farm value of pork dropped 13 percent from the third to the fourth quarter (table 4). This sharp decline in hog prices was barely reflected at the retail level--prices for pork declined less than 1 percent. Because of this sluggishness, the farm-retail spread increased 14 percent from the third quarter to its widest point for the year. It averaged more than 1 percent wider than in the fourth quarter of 1967.

In 1968, returns to farmers for hogs, retail prices of pork, and farm-retail spreads were quite similar to those in 1967. This comparison was true for quarterly averages as well as for annual averages (table 4).

Eggs--Prices Rose and Spreads Widened in Fourth Quarter: Large supplies continued to depress prices received by farmers for eggs during

Table 4.--Beef, pork, and lamb: Retail price, wholesale value, farm value, farm-retail spread, and farmer's share of retail price, annual 1966-68, quarterly 1967-68

| Date               | Retail price    | Wholesale   | Gross               | Byproduct       | Net                 | Farm-retail spread |                      |                    | Farmer's |
|--------------------|-----------------|-------------|---------------------|-----------------|---------------------|--------------------|----------------------|--------------------|----------|
|                    | per pound<br>1/ | value<br>2/ | farm<br>value<br>3/ | allowance<br>4/ | farm<br>value<br>5/ | Total              | Wholesale-<br>retail | Farm-<br>wholesale |          |
|                    | Cents           | Cents       | Cents               | Cents           | Cents               | Cents              | Cents                | Cents              | Percent  |
| Beef, Choice grade |                 |             |                     |                 |                     |                    |                      |                    |          |
| 1966 .....         | 84.3            | 58.9        | 55.5                | 5.9             | 49.6                | 34.7               | 25.4                 | 9.3                | 59       |
| 1967 .....         | 84.1            | 59.7        | 54.3                | 5.0             | 49.3                | 34.8               | 24.4                 | 10.4               | 59       |
| 1968 .....         | 87.2            | 63.0        | 57.5                | 5.1             | 52.4                | 34.8               | 24.2                 | 10.6               | 60       |
| 1967               |                 |             |                     |                 |                     |                    |                      |                    |          |
| Jan.-Mar. ....     | 82.9            | 57.2        | 53.3                | 5.3             | 48.0                | 34.9               | 25.7                 | 9.2                | 58       |
| Apr.-June ....     | 82.5            | 58.2        | 53.1                | 5.1             | 48.0                | 34.5               | 24.3                 | 10.2               | 58       |
| July-Sept. ....    | 84.9            | 62.4        | 56.5                | 5.1             | 51.4                | 33.5               | 22.5                 | 11.0               | 61       |
| Oct.-Dec. ....     | 86.0            | 61.1        | 54.6                | 4.9             | 49.7                | 36.3               | 24.9                 | 11.4               | 58       |
| 1968               |                 |             |                     |                 |                     |                    |                      |                    |          |
| Jan.-Mar. ....     | 86.4            | 62.0        | 56.1                | 4.7             | 51.4                | 35.0               | 24.4                 | 10.6               | 59       |
| Apr.-June ....     | 86.6            | 62.9        | 57.8                | 5.3             | 52.5                | 34.1               | 23.7                 | 10.4               | 61       |
| July-Sept. ....    | 87.8            | 64.1        | 58.6                | 5.1             | 53.5                | 34.3               | 23.7                 | 10.6               | 61       |
| Oct.-Dec. ....     | 88.2            | 63.0        | 57.4                | 5.1             | 52.3                | 35.9               | 25.2                 | 10.7               | 59       |
| Pork               |                 |             |                     |                 |                     |                    |                      |                    |          |
| 1966 .....         | 73.4            | 54.8        | 47.6                | 6.4             | 41.2                | 32.2               | 18.6                 | 13.6               | 56       |
| 1967 .....         | 67.0            | 48.1        | 39.0                | 4.7             | 34.3                | 32.7               | 18.9                 | 13.8               | 51       |
| 1968 .....         | 67.0            | 48.4        | 38.3                | 4.3             | 34.0                | 33.0               | 18.6                 | 14.4               | 51       |
| 1967               |                 |             |                     |                 |                     |                    |                      |                    |          |
| Jan.-Mar. ....     | 66.7            | 47.5        | 38.4                | 5.0             | 33.4                | 33.3               | 19.2                 | 14.2               | 50       |
| Apr.-June ....     | 65.5            | 47.1        | 38.4                | 4.9             | 33.5                | 32.0               | 18.4                 | 13.6               | 51       |
| July-Sept. ....    | 69.4            | 51.4        | 43.1                | 5.0             | 38.1                | 31.3               | 18.0                 | 13.3               | 55       |
| Oct.-Dec. ....     | 66.5            | 46.5        | 36.3                | 4.2             | 32.1                | 34.4               | 20.0                 | 14.4               | 48       |
| 1968               |                 |             |                     |                 |                     |                    |                      |                    |          |
| Jan.-Mar. ....     | 66.1            | 47.0        | 36.7                | 4.3             | 32.4                | 33.7               | 19.1                 | 14.6               | 49       |
| Apr.-June ....     | 66.4            | 48.3        | 38.0                | 4.4             | 33.6                | 32.8               | 18.1                 | 14.7               | 51       |
| July-Sept. ....    | 68.0            | 50.6        | 41.9                | 4.4             | 37.5                | 30.5               | 17.4                 | 13.1               | 55       |
| Oct.-Dec. ....     | 67.5            | 47.8        | 36.6                | 4.0             | 32.6                | 34.9               | 19.7                 | 15.2               | 48       |
| Lamb, Choice grade |                 |             |                     |                 |                     |                    |                      |                    |          |
| 1966 .....         | 85.6            | 59.8        | 55.5                | 8.4             | 47.1                | 38.5               | 25.8                 | 12.7               | 55       |
| 1967 .....         | 87.3            | 60.7        | 52.2                | 5.7             | 46.5                | 40.8               | 26.6                 | 14.2               | 53       |
| 1968 .....         | 92.8            | 65.9        | 57.2                | 6.1             | 51.1                | 41.7               | 26.9                 | 14.8               | 55       |
| 1967               |                 |             |                     |                 |                     |                    |                      |                    |          |
| Jan.-Mar. ....     | 83.6            | 55.8        | 48.9                | 6.3             | 42.6                | 41.0               | 27.8                 | 13.2               | 51       |
| Apr.-June ....     | 85.3            | 62.1        | 54.4                | 6.2             | 48.2                | 37.1               | 23.2                 | 13.9               | 57       |
| July-Sept. ....    | 89.7            | 64.0        | 53.6                | 4.8             | 48.8                | 40.9               | 25.7                 | 15.2               | 54       |
| Oct.-Dec. ....     | 90.1            | 60.8        | 51.7                | 5.2             | 46.5                | 43.6               | 29.3                 | 14.3               | 52       |
| 1968               |                 |             |                     |                 |                     |                    |                      |                    |          |
| Jan.-Mar. ....     | 90.7            | 62.4        | 54.6                | 6.3             | 48.3                | 42.4               | 28.3                 | 14.1               | 53       |
| Apr.-June ....     | 93.0            | 69.1        | 59.6                | 6.2             | 53.4                | 39.6               | 23.9                 | 15.7               | 57       |
| July-Sept. ....    | 93.6            | 65.4        | 57.3                | 6.2             | 51.1                | 42.5               | 28.2                 | 14.3               | 55       |
| Oct.-Dec. ....     | 93.9            | 66.7        | 57.5                | 5.8             | 51.7                | 42.2               | 27.2                 | 15.0               | 55       |

1/ Estimated weighted average price of retail cuts. 2/ Wholesale value of quantity of carcass equivalent to 1 lb. of retail cuts: Beef, 1.35 lb.; pork, 1.00 lb.; lamb, 1.14 lb. 3/ Payment to farmer for quantity of live animal equivalent to 1 lb. of retail cuts: Beef, 2.25 lb.; pork 2.00 lb.; lamb, quantity varies by months from 2.33 lb. in April to 2.38 lb. in October. 4/ Portion of gross farm value attributed to edible and inedible byproduct. 5/ Gross farm value minus byproduct allowance.



most of the first half of 1968. But prices rose sharply as supplies decreased during the first half of the year. The farm value of a dozen eggs in the fourth quarter averaged 11.5 cents higher than in the same period of 1967, but still lower than in the fourth quarters of 1965 and 1966 (table 15, p. 24).

Retail prices generally followed changes at the farm level during the first 3 quarters last year. Therefore, farm-retail spreads changed little during this period and were about the same as a year earlier. But marketing spreads in the fourth quarter averaged 12 percent (2.4 cents) wider than in the third quarter and 6 percent (1.3 cents) wider than a year earlier (table 16, p. 25). In the fourth quarter of 1968, the retail price of eggs averaged 61.1 cents per dozen and 12.7 cents above a year earlier, which was more than the increase in the farm value. This greater increase accounted for the wider spread.

Frying Chickens--Prices Down in Fourth Quarter: In response to increased supplies of red meats and chickens, the farm value of frying chickens declined from the third to the fourth quarter of 1968 (table 15, p. 24). Although the farm value declined 2.1 cents to 18.2 cents it still averaged 1.7 cents above a year earlier. As with pork and eggs, the farm value of

frying chickens dropped more sharply than the retail price, resulting in a wider farm-retail spread.

#### Outlook for 1969

The retail cost of the market basket of farm foods is expected to average higher in 1969, although the increase will probably be much smaller than the 3.5 percent rise in 1968. Prices for market-basket foods during the first half of 1969 are expected to average about the same as in the fourth quarter of 1968. The farm-retail spread, which increased to record size in the fourth quarter, is not expected to change appreciably during the first half of 1969, but likely will widen in the latter half. It is expected to average 2 to 3 percent wider in 1969 than in 1968. The average farm value of the market basket in 1969 is expected to be about the same as the fourth-quarter 1968 level.

Operating costs of food marketing firms likely will average higher in 1969 than in 1968. Hourly earnings of food marketing employees will probably continue to rise, and the rise is not likely to be entirely offset by improvements in output per manhour. Prices of most inputs bought by marketing firms are expected to be higher this year.

## X HIGHER RAIL TRANSPORTATION CHARGES APPROVED X

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On January 23, 1969, the Interstate Commerce Commission approved, in Ex Parte 259, rail rate increases ranging from 3 to 10 percent for most agricultural as well as nonagricultural commodities. Approval was based on the ICC's findings that railroads critically need additional revenue to offset increased operating costs. The Commission added that without increased revenues, the earnings of railroads would be insufficient to provide the public with adequate and efficient transportation service.

In most instances, the newly approved rates do not represent increases over those already in effect under interim authority granted by the Commission in November 1968. In the South, grain will have an increase which will vary with the type of movement and the rate applicable to it. In the East, grain rates go up 3 percent on top of the 3 percent interim increase already allowed. In the West, there will be no further increase in grain rates immediately because railroads have filed a petition for ICC reconsideration and modification



of its order on grain (Finding No. 8). This finding was that: "On grain and grain products in the West, no greater percentage increase may be made in the basic rates for the initial rail movement from the country origin to the primary market than the lowest percentage increase made in the basic through rates from such country origin to a destination beyond such primary market." The intent here is to prevent gathering rates from increasing relative to through rates. The Commission stated that its motive in imposing this condition was to prevent farmers from paying an undue proportion of the increased costs for grain shipments. The railroad's petition asks the Commission to reconsider this finding to permit the increase on the gathering rate. The Commission is expected to act on this petition by March 31, 1969.

Increases on other commodities resulting from Ex Parte 259 include the following:

Fruit and vegetable rates were raised 5 percent except for ramp-to-ramp TOFC (trailer-on-flat-car) shipments which were increased only 3 percent. A 3 percent increase was also permitted for canned citrus products moving in ramp-to-ramp TOFC service, but a 6 percent increase was permitted for other canned citrus shipments. Other processed foods were also permitted a 6 percent rise.

Increases on shelled walnuts cannot be greater than increases on walnuts in the shell, which were granted a 5 percent increase.

Rates on raw cotton were allowed to go up 4-6 percent, according to the weight shipped in a car.

Meat and lard rates in carloads were increased by 2 cents on rates of 80 cents or less per 100 pounds and 5 percent on rates greater than 80 cents. TOFC rates for meat, with some exceptions, were allowed a 6 percent increase. On shipments of vegetable oils and related commodities, the increases in rates are not to exceed those for lard.

Potash and superphosphate, which are basic fertilizer ingredients, and fertilizer were permitted a 3 percent increase.

Accessorial charges for services such as switching and transit were permitted to increase by 6 percent. Such services are frequently included in the rail transportation rate, but where they are not their cost is added to the basic rate to determine the total charge.

The Commission's order is permissive. Railroads may avail themselves of increased rates, but are not required to do so. In the course of the Ex Parte 259 proceedings, which resulted in the ICC's decision, the railroads indicated that some of the competitive rates established in the past few years would not be increased, and that the railroads would move swiftly to readjust rates to prevent loss of traffic to other modes.

At this time, it is not possible to determine the additional rail transportation cost that will be added to agriculture's marketing bill by the general rail rate increase. The ICC, however, estimates that its order permits additional transportation charges on all commodities, both agricultural and nonagricultural, in the amount of \$400 million annually.

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## PROCESSED EGG PRODUCTS; A MARKETING OPPORTUNITY

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Changes in the composition of the population and shifting demand patterns have led to a substantial shift from the more staple items to processed convenience foods that offer economy and built-in service. Processed egg products have participated in this trend. Further development of the market for processed egg products may be an opportunity to offset the long-term downtrend in per capita consumption of shell eggs.

Shell egg consumption has been declining for a variety of reasons. However, many of these same factors provide potential opportunities for processed products. Changes in work and living habits have been important. Because fewer people are engaged in strenuous work, there is less demand for a heavy breakfast than in previous years. An increase in the proportion of married women working outside the home has reduced the amount of time available for preparing meals. More meals are now eaten out in restaurants, snack bars, and school lunch facilities. Also, more people are weight conscious than in the past, and many have become concerned about the effects of various kinds of foods on health. In addition, highly advertised breakfast cereals have offered increasing competition for eggs, particularly among children and young people.

Total egg consumption has remained about stable, except for a gain in 1967. Therefore, per capita consumption of eggs has decreased. A significant aspect has been the decline in consumption of shell eggs and the increase in consumption of egg products (table 5). In the past 15 years, per capita consumption of shell eggs declined 19 percent; consumption of processed egg products increased 36 percent.

Only about 10 percent of the eggs produced in this country are processed into liquid, frozen, and dried form. Trade sources indicate that processing may account for 25 to 30 percent of eggs produced by 1975. 2/ Even if this projection is optimistic, there could still be a rapidly expanding potential market for egg products. Even a conservative estimate of future consumption would result in a market of well over 1 billion pounds of processed egg by 1980 with a wholesale value of \$300 million or more (table 8).

### Industry Structure

The egg processing industry is diverse, operating in many areas of the country. Approximately 160 plants freeze or dry liquid egg on a commercial scale while 400-500 smaller plants salvage eggs through breaking operations. Many drying plants were established during World War II, but most of these plants have since closed. Not more than 30 plants produce dried egg today, and nearly all of them also produce various other liquid and frozen products. Most of the egg processing plants are small breaking operations with no drying or other processing facilities.

Most egg-breaking firms are in the Midwest, although an increasing number of new plants have been set up in the South and West in recent years. The breaking industry traditionally acts as a buffer and removes shell eggs from the market when prices are low and surpluses burdensome. During seasonally high spring production periods, Midwestern plants often compete directly with firms selling shell eggs for their supplies. Newer plants in other regions depend almost entirely on surplus eggs and other eggs not in demand for table use.

1/ The author is stationed at the College Experiment Station, University of Georgia, Athens, Ga.

2/ Halverson, Florence, "What's the Future of Egg Products?" Poultry Tribune, Vol. 73, No. 11, November 1967.

Table 5.--Per capita consumption of shell and processed eggs, 1954-68

| Year                 | Egg consumption |                     |               | Proportion of<br>eggs processed |
|----------------------|-----------------|---------------------|---------------|---------------------------------|
|                      | Shell           | Processed <u>1/</u> | Total         |                                 |
|                      | <u>Number</u>   | <u>Number</u>       | <u>Number</u> | <u>Percent</u>                  |
| 1954 .....           | 351             | 25                  | 376           | 6.6                             |
| 1955 .....           | 346             | 25                  | 371           | 6.7                             |
| 1956 .....           | 345             | 24                  | 369           | 6.5                             |
| 1957 .....           | 335             | 27                  | 362           | 7.5                             |
| 1958 .....           | 328             | 26                  | 354           | 7.3                             |
| 1959 .....           | 319             | 33                  | 352           | 9.4                             |
| 1960 .....           | 306             | 28                  | 334           | 8.4                             |
| 1961 .....           | 298             | 30                  | 328           | 9.1                             |
| 1962 .....           | 296             | 30                  | 326           | 9.2                             |
| 1963 .....           | 290             | 27                  | 317           | 8.5                             |
| 1964 .....           | 287             | 31                  | 318           | 9.7                             |
| 1965 .....           | 285             | 29                  | 314           | 9.2                             |
| 1966 .....           | 283             | 30                  | 313           | 9.6                             |
| 1967 .....           | 289             | 35                  | 324           | 10.8                            |
| 1968 <u>2/</u> ..... | 284             | 34                  | 318           | 10.7                            |

1/ Shell-egg equivalent.2/ Preliminary.

Egg-breaking and processing firms are typically low-margin, high-volume operations. Seasonality of production can affect profits greatly. Some processors have experimented with large scale procurement programs in an attempt to control quality characteristics and assure a longer season or more stable year-round supply of raw material.

Yolk color has always been a problem for egg processors. Food manufacturers and bakeries often require eggs that have specific color and emulsifying properties. Long standing difficulties with salmonella and other pathogenic organisms has led to mandatory pasteurization of egg products; this has added considerably to plant investment and operating expense.

#### Processed Egg Products

The principal processed products are plain whole eggs, mixed whole egg blends, albumen, plain yolks, sugared and salted

yolks, and various other yolk and albumen combinations. Plain whole eggs are a mixture of whites and yolks in natural proportions containing a minimum of 24.7 percent solids. Mixed whole eggs are a blend of whole eggs with extra yolk, sugar, salt, or syrup added according to a pre-determined formula. Whole eggs, both plain and mixed blends, account for about half of all processed eggs (table 6).

In terms of volume, albumen and albumen products are next in importance, accounting for about 26 percent of the processed market. Albumen products have traditionally had more limited uses than yolks or whole egg blends, and in the past, supplies have often been burdensome. Substantial quantities of albumen are sold in dried form. The term "egg solids" is often used interchangeably with dried eggs.



Table 6.--Production of processed egg products by type of product, 1968

| Type of product                      | :Whole egg<br>:and blends :         | : Albumen | :Plain yolk<br>:and blends : | : Total | : Share of<br>: production |
|--------------------------------------|-------------------------------------|-----------|------------------------------|---------|----------------------------|
|                                      | - - - - <u>1,000 pounds</u> - - - - |           |                              |         | <u>Percent</u>             |
| Frozen .....                         | 203,757                             | 67,263    | 89,586                       | 360,606 | 53                         |
| Dried <u>1/</u> .....                | 125,364                             | 99,699    | 28,116                       | 253,179 | 38                         |
| Liquid .....                         | 37,608                              | 11,661    | 13,697                       | 62,966  | 9                          |
| Total .....                          | 366,729                             | 178,623   | 131,399                      | 676,751 | 100                        |
| Percent of total<br>production ..... | 54                                  | 26        | 20                           |         | 100                        |

1/ On a liquid equivalent basis, ingredients added.

Data from Egg Products: Frozen, Solids Production, Pou. 2-5. (1-69) Statistical Reporting Service, USDA, January 29, 1969.

Plain yolks and blended yolk formulations account for about 20 percent of the processed egg market, but these products are more valuable and have a greater variety of uses than albumen. Sugared or salted yolk combinations are most common. They consist of a minimum of 43 percent solids plus 10 percent sugar or 10 percent salt. Specialized blends with dark yolk color usually command a substantial price premium.

#### Production and Uses of Various Product Forms

Frozen Eggs: Frozen eggs account for well over half of the production of processed egg products. Frozen whole eggs or whole egg blends are currently the largest single component of the egg products market. However, many yolk products are also sold in frozen form. Large quantities of frozen eggs are used by the baking industry, institutional outlets such as hospitals, hotels, and restaurants, and a variety of other food manufacturers producing baby foods, mayonnaise, noodles and macaroni, and other products (table 7). Production of frozen eggs is declining relative to

the production of dried eggs and liquid eggs for immediate consumption. Various trade sources estimate that frozen eggs may drop to only 15 or 20 percent of processed egg production by 1975. 3/

Liquid Eggs: Fresh liquid eggs currently constitute less than 10 percent of processed egg production. Over half of the liquid eggs is sold as whole eggs or mixed whole blends. Albumen and yolk products account about equally for the remainder of sales. Substantial quantities of liquid eggs are used by confectionery firms and candy makers. Many large food manufacturers are now using substantial quantities of liquid eggs.

In recent years, many bakeries and large institutions that traditionally used frozen eggs have shown a renewed interest in liquid products. This could provide a greater market for liquid eggs as improved handling methods are devised.

The market for liquid products is expected to increase significantly over the next few years as additional large users adapt their operations to handle this product which can be transported

3/ See footnote 2.



Table 7.--Proportions of processed egg products used by selected food manufacturing industries 1960 <sup>1/</sup>

| Type of product | Bakeries | Premix manufacturers | Confectionery firms | Miscellaneous food manufacturers <sup>2/</sup> |
|-----------------|----------|----------------------|---------------------|--|
|                 | Percent  |                      |                     |  |
| Frozen .....    | 80       | --                   | 27                  | 60   |
| Dried .....     | 13       | 100                  | 4                   | 3  |
| Liquid .....    | 5        | --                   | 63                  | 3  |
| Shell .....     | 2        | --                   | 6                   | 34   |

<sup>1/</sup> Based on survey of food manufacturing industries, MRR-608, Present and Potential Use of Egg Products in the Food Manufacturing Industry, ERS, USDA, June 1963, p. 4.

<sup>2/</sup> Includes manufacturers of noodles, macaroni, and ravioli; salad dressing and mayonnaise; meat and fish products; baby foods; and specialty items.

directly from producing areas in tank trucks. Lower handling costs and savings on transportation are the primary advantages of using liquid egg. They also have less physical breakdown and improved flowability characteristics resulting from omission of the freezing process.

Dried Eggs: Dried egg solids constitute over one-third of the processed egg market. Production of egg solids has increased steadily since the early 1950's, when dried egg was at its low point after the enormous demand stimulated by the price support program of World War II. Solids production is more concentrated in albumen and whole egg and blends. Recent technical improvements in anticaking agents have improved the flowability of reconstituted dried whole egg and yolk products. These developments might help to increase the future use of egg solids by the baking industry. <sup>4/</sup>

Large quantities of dried eggs are used by bakeries and the premix industry in manufacturing cake and pie mixes, doughnut mixes, and dessert specialties.

Bakeries and other large food manufacturers are reportedly using larger amounts of egg solids than they have in previous years, due to improved product characteristics and increased economies and convenience in handling. Trade sources estimate that egg solids will gradually become the most important type of processed product. By 1975, egg solids may account for as much as 50 percent of processed egg production.

#### Market Potential

Egg production is a \$2 billion a year business for U.S. farmers. Processed eggs are a small but growing segment of this market. In 1968 over 500 million dozen eggs were used to produce more than 670 million pounds of processed egg products. These eggs had a wholesale market value of about \$160 million (table 8). With expanding population, increasing levels of income, and greater desire for convenience foods, sales of egg products could increase rapidly.

<sup>4/</sup> Kahlenberg, Orme J., "Recent Developments in the Egg Industry," Bakers Digest, Vol. 41, No. 5., October 1967.

Table 8.--Processed egg products: Production, price, and wholesale value, 1954-68, with projections to 1980

| Year                | Eggs used for processing | Production of processed eggs | Wholesale price of frozen whole eggs | Estimated value of processed products |
|---------------------|--------------------------|------------------------------|--------------------------------------|---------------------------------------|
|                     | <u>Mil. doz.</u>         | <u>Mil. lb.</u>              | <u>Ct. per lb.</u>                   | <u>Mil. dol.</u>                      |
| 1954.....           | 363                      | 466                          | 28.4                                 | 132                                   |
| 1955.....           | 353                      | 453                          | 31.7                                 | 144                                   |
| 1956.....           | 362                      | 465                          | 30.9                                 | 144                                   |
| 1957.....           | 370                      | 475                          | 27.5                                 | 131                                   |
| 1958.....           | 365                      | 481                          | 30.2                                 | 145                                   |
| 1959.....           | 533                      | 701                          | 26.0                                 | 182                                   |
| 1960.....           | 442                      | 582                          | 27.9                                 | 162                                   |
| 1961.....           | 482                      | 635                          | 30.4                                 | 193                                   |
| 1962.....           | 482                      | 635                          | 27.7                                 | 176                                   |
| 1963.....           | 446                      | 587                          | 26.8                                 | 157                                   |
| 1964.....           | 500                      | 659                          | 26.0                                 | 171                                   |
| 1965.....           | 478                      | 629                          | 25.7                                 | 162                                   |
| 1966.....           | 472                      | 621                          | 31.8                                 | 198                                   |
| 1967.....           | 609                      | 802                          | 24.7                                 | 198                                   |
| 1968 <u>1</u> /.... | 514                      | 677                          | 23.8                                 | 161                                   |
| 1970 <u>2</u> /.... | 645                      | 850                          | 25.0                                 | 212                                   |
| 1975 <u>2</u> /.... | 790                      | 1,040                        | 25.0                                 | 260                                   |
| 1980 <u>2</u> /.... | 964                      | 1,270                        | 25.0                                 | 318                                   |

1/ Preliminary.2/ Projected by author.

Data on production compiled from Agricultural Statistics, 1967; current estimates from Egg Products, Liquid, Frozen, Solids Production, Statistical Reporting Service, USDA. Price data from annual summaries of Dairy and Poultry Market Statistics, Consumer and Marketing Service, USDA.

Transforming whole eggs into various blends of liquid and solids content for use in final products is a complex process. Whether used by bakeries or by food manufacturers, the technical problems in developing products with the specific characteristics needed are formidable. Quality characteristics of egg products can be classified into the following general groups: 5/

- (1) Chemical composition and nutritive value
- (2) Unnatural components and additives
- (3) Sensory properties
- (4) Microbiological composition
- (5) Functional properties

All of these factors can affect the market demand for processed egg products, even though functional properties have

5/ See C.F. Saunders, World Poultry Science Journal, Vol. 20, No. 4, pp. 269-276, April 1964.

generally been recognized as being most important. For example, bakeries want products of uniform color, acidity, and beating time. Other processors are concerned with flowability, viscosity, emulsification or leavening properties, and foaming and whipping qualities. On the other hand, sensory properties would be most important in convenience products.

Egg products are sold mainly to commercial food manufacturers and institutional food firms with relatively small amounts sold to consumer markets and industrial outlets.

Because processed eggs have certain unique properties, they are needed in food manufacturing, even if only as a small proportion in many ingredient mixes. The demand for processed eggs in such uses is relatively inelastic with respect to price in the short run. Substitutes are available for some uses, but only long-run price changes are likely to affect the mix formulation. There is some evidence that substitutes are being used more frequently than in the past. <sup>6/</sup> Bakeries, candy makers, and large institutions have used substitutes such as soy albumen, lecithin, and gelatins of various kinds. Other companies have substituted fresh shell eggs for processed products, but this is not usually feasible where convenience in handling, specific product characteristics, shelf life, and cost are important. On the other hand, substitution of processed products for fresh eggs is a strong possibility in certain segments of the consumer and institutional markets due to the increasing demand for convenience foods.

The egg product industry may have a significant potential in the consumer market. A number of large companies

and educational institutions are developing new egg products for the consumer market. Some of the products for the consumer market are items where eggs are combined with fruit juices or other foods to prepare such products as combination juices, omelets, scrambled eggs, egg salads, and french toast. Some of these items are dried and can be quickly reconstituted; while others are frozen and can be heated in the family toaster. Many food companies that have considered marketing processed egg products, however, do not have the technical capability or experience of specialized egg processing firms. On the other hand, many egg processors have been content to supply intermediate users and manufacturers with the raw material needed for end-products not recognizing the opportunity in convenience foods.

Markets for eggs in nonfood products also may be further developed. Eggs for industrial use include inedible and substandard quality products which are used in leather tanning, photography, adhesives, and as a color fixing agent in certain textile processes. Some eggs are also used for medical experiments and in the production of vaccines. Considerably greater quantities have been used in pet foods, fertilizers, and animal feeds. There are also technical possibilities of using egg products in other industrial or chemical processes.

Export markets for processed egg products are another potential outlet, although U.S. shell egg exports have been declining in recent years. Development of new or improved products could open up foreign markets for aggressive manufacturers and processors able to meet quality and sanitation standards. <sup>7/</sup>

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<sup>6/</sup> Enochian, R.V., and R.F. Saunders, Present and Potential Use of Egg Products in the Food Manufacturing Industry, MRR-608, ERS, USDA, June 1963.

<sup>7/</sup> The importance of these standards is revealed in a report by R.V. Enochian, "How Europe Rates U.S. Egg Products," Poultry and Egg Situation, PES-225, ERS, USDA, May 1963.



# X COMMERCIAL FLORICULTURE; A CHANGING AGRIBUSINESS X

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## As An Old Industry

Flower production dates back to ancient times. The family owned production unit has dominated this industry. Commercial floriculture represents an intensive use of small plots of land, yielding relatively high returns. The average outdoor producing unit in 1964 was only 4.5 acres. Greenhouse production per farm used only 12,935 square feet. Yet, the wholesale value of flowers from the 21,301 farms producing flowers and flowering plants for sale in 1964 was \$16,809 per farm.

The marketing of flowers also has been predominantly a local business because of the perishability of cut flowers.

The typical firm marketing flowers today is smaller than the usual food and fiber distributing firm. For example, commercial retail floriculture has been comprised mainly of some 22,000 florists. Of this number in 1964, only 352 were classified as very large--those with annual sales in excess of \$250,000. <sup>1/</sup> In total, however, the retailing of florist crops in 1964 involved an estimated \$1.5 billion in sales.

## As A New Industry

Florist crop culture is a growth industry in our modern economy. The whole-sale value of crop production to supply this market increased from \$191 million in 1949 to an industry-estimated \$450 million in 1967 (table 9).

The increase in value of these products in marketing is substantial. Today the florist crop industry employs over 50,000 persons as owners and officers of business, with an additional 100,000 full-time paid employees and about 100,000

part-time paid employees and unpaid family workers. These persons are supported by sales of cut flowers and related products in excess of \$2 billion. For example, adults purchasing as individuals in the marketing year 1966-67 spent an estimated \$1.9 billion on cut flowers and related products. Adding in institutional sales of cut flowers and related products indicates that commercial floriculture is now a sizable industry.

Growth in the total value of products has been accompanied by growth in the size of production units and marketing organizations. Institutional changes coupled with technical innovations such as cargo jet aircraft and market news services have created a new outlook for this industry. Three changing factors of immediate economic impact are market potential, marketing patterns, and distribution of cut flowers and related products.

## Changes in Market Potential

Most purchases of the products of commercial floriculture are made by people whose incomes are in excess of \$5,000 and who live in metropolitan areas, particularly suburbs. Incomes have been increasing rapidly in recent years. <sup>2/</sup> Purchases also increase with the degree of education. Thus, purchases of flowers and plants are expected to increase with rising levels of education and income.

Production of greenhouse and nursery crops has been largest in States with high retail sales of goods and services (table 10). This reflects the past importance of local production and use. However, California and Florida represent

<sup>1/</sup> A Graphic View of the Retail Florist Industry, MRR-788, ERS, USDA, April 1967.

<sup>2/</sup> Mean income of men over 25 in 1966 (in constant dollars) was \$6,900, up from \$5,300 in 1956. Consumer Income, Current Population Reports Series P-60, No. 56, U.S. Dept. of Commerce, August 14, 1968.



Table 9.--Wholesale value of florist crops, 1949, 1959, and 1967

| Crop                                   | Year                        |                |                |
|--|-----------------------------|----------------|----------------|
|  | 1949 <u>1/</u>              | 1959 <u>1/</u> | 1967 <u>2/</u> |
|  | ----- Million dollars ----- |                |                |
| Cut flowers and cultivated greens..... | 123.6                       | 142.6          | 190            |
| Potted plants.....                     | 36.7                        | 95.1           | 155            |
| Bedding plants and unfinished crops... | 30.6                        | 54.6           | 105            |
| Total.....                             | 190.9                       | 292.3          | 450            |

1/ Data from special censuses.2/ Industry estimate.

Table 10.--Rank of States by total retail sales and cash receipts for greenhouse and nursery crops, selected States, 1963

| State              | Rank   |   |
|--------------------|--|---|
|                    | Retail sales of goods and services <u>1/</u> | Cash receipts of greenhouse and nursery crops <u>2/</u> |
| California.....    | 1  | 1   |
| New York.....      | 2  | 4   |
| Illinois.....      | 3  | 6   |
| Pennsylvania.....  | 4  | 2   |
| Ohio.....          | 5  | 5   |
| Texas.....         | 6  | 11  |
| Michigan.....      | 7  | 8   |
| New Jersey.....    | 8  | 7   |
| Massachusetts..... | 9  | 10  |
| Florida.....       | 10   | 3   |

1/ Census of Business, 1963.2/ Farm Income, State estimates FIS-195 Supplement, ERS, USDA, Aug. 1964.

areas of recent rapid growth in production associated with changes in the distribution pattern for cut flowers and related products.

Florida is now third in the value of production, although it ranks tenth in total retail sales. Florida has a well organized and integrated industry shipping to markets in the Northeast and North Central States.

U.S. commercial floriculture is no longer a local business nor is its market a monopoly of agriculture. Competition for markets has developed by expansion in foreign and domestic production of artificial flowers, which are becoming increasingly important.

#### Changes in Marketing Patterns

At one time the New York City wholesale flower market was the place to meet industry people and determine what was happening in flower marketing. Today its relative importance has declined as California has overtaken New York in population and retail business activity.

Another sign of change is the development of terminal market news services by the USDA's Consumer and Marketing Service in San Francisco, Dallas, and Chicago, to provide the industry with vital information about these rapidly changing cut flower markets. The change from a "local" business to national and international business in these markets is apparent.

Cut flower market news reports in New York listed prices of 5 California grown flowers on the daily market news reports in January. The cut flower report in Dallas now carries prices of California and Colorado carnations, orchids from Illinois, and gladioli from Florida.

Chicago market news reports carry prices of flowers from California, Indiana, Missouri, and Colorado and Massachusetts on selected days.

The average January report from San Francisco listed prices of flowers from

such areas as Washington, Southern California, West Germany, and Hawaii.

Cut flowers delivered from Hawaii and West Germany to mainland U.S. markets were impossible before the development of air cargo. But rapid transport is not the only factor in the development of these new distribution patterns.

Innovations in producing, packing, and communicating now make it possible to ship cut flowers from Hawaii, Central America, or Europe to any city within the United States in less than 24 hours. The products can move quickly to where demand exists. This change in potential in market area for producing units will continue to expand with the technical innovations being introduced in communication and transportation.

#### Changes in Communication and Transportation

The telegraph enabled the florist industry to organize to provide nationwide delivery of flowers. The telephone has continued this improvement.

Rapid communication and transit are vital to this industry. Flowers have a very short life of maximum value. They are fragile but have high value in relation to their weight and volume.

Railroads handled short distance shipments of flowers 50 years ago. Trucks extended the marketing area with the improvement in highways, but the greatest boon is the economics of shipping via giant cargo airplanes.

Flowers have been one of the principal agricultural products carried for years by air cargo carriers. The volume of air shipment by the floriculture industry has become sufficiently important to the economics of the air transportation industry to initiate significant negotiations on methods and procedures for such details as handling, carrier responsibility, and equitable rates on a national basis. For example, special packaging requirements have been established for cut flowers by air. Air cargo carriers

have financed advertising for flowers in trade magazines. 3/

Domestic shipments of flowers by air from Florida have become important to producers. The volume shipped by air relative to other means has been increasing (table 11).

The variation in daily shipments of flowers from Florida in 1969 by air and truck has been substantial (table 12). The wide variation in daily shipments of flowers does not reflect daily demand in flower markets. Therefore, the producers may be able to increase their returns by improving the flow of product from producer to user.

Table 11.--Shipments of cut chrysanthemums from Florida, by mode of transport, 1964-65 and 1967-68 1/

| Marketing<br>year | : | Truck          | : | Air            | : | Other          | : | Total          |
|-------------------|---|----------------|---|----------------|---|----------------|---|----------------|
|                   | : | Percent        | : | Percent        | : |                | : |                |
|                   | : | 1,000          | : | 1,000          | : | 1,000          | : | 1,000          |
|                   | : | <u>cartons</u> | : | <u>cartons</u> | : | <u>cartons</u> | : | <u>cartons</u> |
|                   | : |                | : |                | : |                | : |                |
| 1964-65 .....     | : | 433.9          | : | 44.6           | : | 8.4            | : | 486.9          |
| 1967-68 .....     | : | 494.9          | : | 71.8           | : | 4.0            | : | 570.7          |

1/ Cartons averaging 29 bunches of cut flowers.

Data from Florida Flower Shipments, annual summaries, Federal-State Market News Service.

Table 12.--Daily shipments of gladioli and chrysanthemums from Florida, by mode of transport, selected January 1969 dates

| Day of month   | : | Gladioli                 |   | :     | Chrysanthemums           |     |   |       |
|----------------|---|--------------------------|---|-------|--------------------------|-----|---|-------|
|                | : | Air                      | : | Truck | :                        | Air | : | Truck |
|                | : |                          | : |       | :                        |     | : |       |
| <u>January</u> | : | <u>Hampers</u> <u>1/</u> |   | :     | <u>Cartons</u> <u>2/</u> |     | : |       |
|                | : |                          | : |       | :                        |     | : |       |
| 16 .....       | : | 813                      | : | 1,446 | :                        | 295 | : | 562   |
| 18 .....       | : | 362                      | : | 3,279 | :                        | 101 | : | 4,045 |
| 20 .....       | : | 561                      | : | 3,688 | :                        | 366 | : | 3,939 |
| 22 .....       | : | 766                      | : | 971   | :                        | 588 | : | 1,797 |
| 23 .....       | : | 480                      | : | 1,597 | :                        | 538 | : | 512   |
|                | : |                          | : |       | :                        |     | : |       |

1/ Hampers, averaging 22 bunches.

2/ Cartons, averaging 29 bunches.

Data from Daily Market News Shipment Report.

3/ "Air Cargo? Just a Speck in the Sky." Marketing Communications, December 1968.

Air shipments for export remain small but the growth in shipments has been encouraging (table 13). International shipment of flowers has become important enough

to be studied also by major industry interests to determine how to handle this potential market and source of competitive products.

Table 13.--Export shipments of mums and gladioli from Florida by destination, 1964-65 and 1967-68

| Destination and marketing year | Mums              | Gladioli          |
|--------------------------------|-------------------|-------------------|
|                                | <u>Cartons 1/</u> | <u>Hampers 2/</u> |
| Carribean:                     |                   |                   |
| 1964-65 .....                  | 6,592             | 9,311             |
| 1967-68 .....                  | 12,842            | 12,871            |
| Canada:                        |                   |                   |
| 1964-65 .....                  | 4,470             | 9,848             |
| 1967-68 .....                  | 6,003             | 9,410             |
| Europe:                        |                   |                   |
| 1964-65 .....                  | 127               | 400               |
| 1967-68 .....                  | 29                | 8,622             |

1/ Cartons averaging 29 bunches of cut flowers.

2/ Hampers averaging 22 bunches.

Data from Florida Flower Shipments, annual summaries, Federal-State Market News Service.

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Table 14.--Farm food products: Retail cost, farm value of equivalent quantities sold by producers, byproduct allowance, farm-retail spread, and farmer's share of retail cost, October-December 1968.

| Product 1/                             | Farm product equivalent  | Retail unit  | Retail cost | Gross farm value | Byproduct allowance | Net farm value 2/ | Farm-retail spread | Farmer's share |
|--|--|--|-------------|------------------|---------------------|-------------------|--------------------|----------------|
|  |  |  | Dollars     | Dollars          | Dollars             | Dollars           | Dollars            | Percent        |
| Market basket .....                    |  |  | 1,128.30    | ---              | ---                 | 432.82            | 695.48             | 38             |
| Meat products .....                    |  |  | 327.43      | ---              | ---                 | 168.51            | 158.92             | 51             |
| Dairy products .....                   |  |  | 204.98      | ---              | ---                 | 98.17             | 106.81             | 48             |
| Poultry and eggs .....                 |  |  | 91.58       | ---              | ---                 | 50.52             | 41.06              | 55             |
| Bakery and cereal products 3/          |  |  |             |                  |                     |                   |                    |                |
| All ingredients .....                  | Farm produce equivalent to products bought                     | Average quantities purchased                                   | 171.14      | ---              | ---                 | 32.36             | 138.78             | 19             |
| Grain .....                            | per urban wage-earner and clerical-worker household in 1960-61 | per urban wage-earner and clerical-worker household in 1960-61 | ---         | 29.92            | 5.26                | 24.66             | ---                | 14             |
| All fruits and vegetables .....        |  |  | 245.54      | ---              | ---                 | 64.42             | 181.12             | 26             |
| Fresh fruits and vegetables .....      |  |  | 121.90      | ---              | ---                 | 39.51             | 82.39              | 32             |
| Fresh fruits .....                     |  |  | 51.00       | ---              | ---                 | 16.26             | 34.74              | 32             |
| Fresh vegetables .....                 |  |  | 70.90       | ---              | ---                 | 23.25             | 47.65              | 33             |
| Processed fruits and vegetables .....  |  |  | 123.64      | ---              | ---                 | 24.91             | 98.73              | 20             |
| Fats and oils .....                    |  |  | 37.92       | 26.07            | 16.69               | 9.38              | 28.54              | 25             |
| Miscellaneous products .....           |  |  | 49.71       | ---              | ---                 | 9.46              | 40.25              | 19             |
|  |  |  | Cents       | Cents            | Cents               | Cents             | Cents              | Percent        |
| Beef, Choice grade .....               | 2.25 lb. Choice grade cattle                                   | Pound  | 88.2        | 57.4             | 5.1                 | 52.3              | 35.9               | 59             |
| Lamb, Choice grade .....               | 2.37 lb. lamb  | Pound  | 93.9        | 57.5             | 5.8                 | 51.7              | 42.2               | 55             |
| Pork .....                             | 2.00 lb. hogs  | Pound  | 67.5        | 36.6             | 4.0                 | 32.6              | 34.9               | 48             |
| Butter .....                           | Cream and whole milk   | Pound  | 83.8        | 97.5             | 37.5                | 60.0              | 23.8               | 72             |
| Cheese, American process .....         | Milk for American cheese                                       | $\frac{1}{2}$ pound  | 45.1        | 20.6             | .8                  | 19.8              | 25.3               | 44             |
| Ice cream .....                        | Cream, milk, and sugar   | $\frac{1}{2}$ gallon   | 81.1        | ---              | ---                 | 26.4              | 54.7               | 33             |
| Milk, evaporated .....                 | Milk for evaporating   | $1\frac{1}{2}$ -ounce can                                      | 17.4        | 8.3              | .2                  | 8.1               | 9.3                | 47             |
| Milk, fresh .....                      |  |  |             |                  |                     |                   |                    |                |
| Home delivered .....                   | 4.39 lb. Class I milk  | $\frac{1}{2}$ gallon   | 61.3        | ---              | ---                 | 27.3              | 34.0               | 45             |
| Sold in stores .....                   | 4.39 lb. Class I milk  | $\frac{1}{2}$ gallon   | 54.6        | ---              | ---                 | 27.3              | 27.3               | 50             |
| Chickens, frying, ready-to-cook .....  | 1.37 lb. broiler   | Pound  | 39.4        | ---              | ---                 | 18.2              | 21.2               | 46             |
| Eggs, Grade A large .....              | 1.03 dozen   | Dozen  | 61.1        | ---              | ---                 | 39.1              | 22.0               | 64             |
| Bread, white .....                     |  |  |             |                  |                     |                   |                    |                |
| All ingredients .....                  | Wheat and other ingredients                                    | Pound  | 22.7        | ---              | ---                 | 3.2               | 19.5               | 14             |
| Wheat .....                            | .877 lb. wheat   | Pound  | ---         | 2.9              | .4                  | 2.5               | ---                | 11             |
| Bread, whole or cracked wheat .....    | Wheat and other ingredients                                    | Pound  | 30.6        | ---              | ---                 | 3.1               | 27.5               | 10             |
| Cookies, cream filled .....            | Wheat and other ingredients                                    | Pound  | 50.8        | ---              | ---                 | 4.4               | 46.4               | 9              |
| Corn flakes .....                      | 2.87 lb. yellow corn   | 12 ounces  | 31.3        | 4/5.4            | 4/3.1               | 4/2.3             | 29.0               | 7              |
| Flour, white .....                     | 6.8 lb. wheat  | 5 pounds   | 58.0        | 23.0             | 3.0                 | 20.0              | 38.0               | 34             |
| Apples .....                           | 1.04 lb. apples  | Pound  | 21.1        | ---              | ---                 | 8.3               | 12.8               | 39             |
| Grapefruit .....                       | 1.03 grapefruit  | Each   | 17.8        | ---              | ---                 | 3.7               | 14.1               | 21             |
| Lemons .....                           | 1.04 lb. lemons  | Pound  | 26.4        | ---              | ---                 | 6.2               | 20.2               | 23             |
| Oranges .....                          | 1.03 doz. oranges  | Dozen  | 101.4       | ---              | ---                 | 25.2              | 76.2               | 25             |
| Cabbage .....                          | 1.08 lb. cabbage   | Pound  | 12.0        | ---              | ---                 | 3.8               | 8.2                | 32             |
| Carrots .....                          | 1.03 lb. carrots   | Pound  | 15.8        | ---              | ---                 | 5.2               | 10.6               | 33             |
| Celery .....                           | 1.08 lb. celery  | Pound  | 15.7        | ---              | ---                 | 4.2               | 11.5               | 27             |
| Cucumbers .....                        | 1.09 lb. cucumbers   | Pound  | 27.2        | ---              | ---                 | 15.7              | 11.5               | 58             |
| Lettuce .....                          | 1.88 lb. lettuce   | Head   | 29.8        | ---              | ---                 | 10.8              | 19.0               | 36             |
| Onions .....                           | 1.06 lb. onions  | Pound  | 13.5        | ---              | ---                 | 3.7               | 9.8                | 27             |
| Peppers, green .....                   | 1.09 lb. peppers   | Pound  | 35.5        | ---              | ---                 | 12.7              | 22.8               | 36             |
| Potatoes .....                         | 10.42 lb. potatoes   | 10 pounds  | 74.0        | ---              | ---                 | 20.2              | 53.8               | 27             |
| Spinach .....                          | .71 lb. spinach  | 10 ounces  | 32.3        | ---              | ---                 | 6.7               | 25.6               | 21             |
| Tomatoes .....                         | 1.18 lb. tomatoes  | Pound  | 40.9        | ---              | ---                 | 15.8              | 25.1               | 39             |
| Peaches, canned .....                  | 1.60 lb. Calif. cling peaches                                  | No. 2 $\frac{1}{2}$ can  | 34.9        | ---              | ---                 | 6.0               | 28.9               | 17             |
| Pears, canned .....                    | 1.85 lb. pears for canning                                     | No. 2 $\frac{1}{2}$ can  | 51.8        | ---              | ---                 | 10.2              | 41.6               | 20             |
| Beets, canned .....                    | 1.24 lb. beets for canning                                     | No. 303 can  | 18.7        | ---              | ---                 | 1.4               | 17.3               | 7              |
| Corn, canned .....                     | 2.495 lb. sweet corn   | No. 303 can  | 24.3        | ---              | ---                 | 3.0               | 21.3               | 12             |
| Peas, canned .....                     | .69 lb. peas for canning                                       | No. 303 can  | 24.8        | ---              | ---                 | 3.8               | 21.0               | 15             |
| Tomatoes, canned .....                 | 1.84 lb. tomatoes for canning                                  | No. 303 can  | 20.0        | ---              | ---                 | 3.7               | 16.3               | 18             |
| Orange juice concentrate, frozen ..... | 3.14 lb. oranges   | 6-ounce can  | 22.2        | ---              | ---                 | 9.6               | 12.6               | 43             |
| French fried potatoes, frozen .....    | 1.38 lb. potatoes  | 9 ounces   | 15.7        | ---              | ---                 | 2.4               | 13.3               | 15             |
| Peas, frozen .....                     | .70 lb. peas for freezing                                      | 10 ounces  | 20.8        | ---              | ---                 | 3.6               | 17.2               | 17             |
| Beans, dried .....                     | 1.00 lb. Mich. dry beans                                       | Pound  | 19.9        | ---              | ---                 | 7.9               | 12.0               | 40             |
| Margarine .....                        | Soybeans, cottonseed, and milk                                 | Pound  | 27.7        | 19.0             | 12.6                | 6.4               | 21.3               | 23             |
| Peanut butter .....                    | 1.33 lb. peanuts   | 12-ounce jar   | 44.7        | ---              | ---                 | 16.0              | 28.7               | 36             |
| Salad and cooking oil .....            | Soybeans, cottonseed, and corn                                 | 24-ounce bottle  | 53.2        | 41.1             | 30.4                | 10.7              | 42.5               | 20             |
| Vegetable shortening .....             | Soybeans and cottonseed  | 3 pounds   | 83.0        | 66.4             | 44.2                | 22.2              | 60.8               | 27             |
| Sugar .....                            | Sugar beets and cane   | 5 pounds   | 61.1        | 26.7             | 1.6                 | 5/25.1            | 5/36.0             | 5/41           |
| Spaghetti with sauce, canned .....     | Wheat, tomatoes, cheese, sugar                                 | 15 $\frac{1}{2}$ -ounce can                                    | 17.0        | ---              | ---                 | 2.1               | 14.9               | 12             |

1/ Product groups include more items than those listed in this table. For example, in addition to the products listed--Choice beef, lamb, and pork (major products except lard)--the meat products group includes lower grades of beef, the minor edible pork products, and veal.

2/ Gross farm value adjusted to exclude imputed values of byproducts obtained in processing.

3/ For the bakery products group and the individual wheat products, gross farm value, byproduct allowance, net farm value, and farmer's share are based on the market price of wheat received by farmers plus the cost of the marketing certificate to millers. This cost is returned to farmers complying with the Wheat Program.

4/ Based on market price of corn received by farmers; no allowance made for price support payment received by farmers who comply with the Federal Feed Grain Program.

5/ Net farm value adjusted for Government payments to producers was 28.9 cents, farm-retail spread adjusted for Government processor tax was 33.3 cents, farmer's share of retail cost based on adjusted farm value was 47 percent.

Table 15.--Farm food products: Retail cost and farm value, October-December 1968, July-September 1968, October-December 1967 and 1957-59 average

| Product 1/                            | Retail unit  | Retail cost             |                        |                         |            |                         |            | Net farm value 2/                |               |                         |            |                         |            |
|---------------------------------------|--|-------------------------|------------------------|-------------------------|------------|-------------------------|------------|----------------------------------|---------------|-------------------------|------------|-------------------------|------------|
|                                       |  | October-December 1968   |                        | July-September 1968     |            | October-December 1967   |            | October-December 1957-59 average |               | October-December 1968   |            | July-September 1968     |            |
|                                       |  | Percentage change from- |                        | Percentage change from- |            | Percentage change from- |            | Percentage change from-          |               | Percentage change from- |            | Percentage change from- |            |
|                                       |  | Oct. 1968               | Sept. 1968             | Oct. 1968               | Sept. 1968 | Oct. 1967               | Sept. 1967 | Oct. 1957-59                     | Sept. 1957-59 | Oct. 1968               | Sept. 1968 | Oct. 1967               | Sept. 1967 |
|                                       |  | Dollars                 | Dollars                | Dollars                 | Dollars    | Percent                 | Percent    | Percent                          | Percent       | Dollars                 | Dollars    | Dollars                 | Dollars    |
|                                       |  |                         |                        |                         |            |                         |            |                                  |               |                         |            |                         |            |
| Market basket .....                   |  | 1,128.30 <sup>3/</sup>  | 1,128.21 <sup>3/</sup> | 1,083.09                | 982.65     | 4/                      | 4.2        | 432.82                           | 3/443.79      | 406.83                  | 387.87     | -2.5                    | 6.4        |
| Meat products .....                   |  | 327.43                  | 3/327.30               | 3/320.30                | 285.05     | 4/                      | 2.2        | 168.51                           | 181.16        | 161.42                  | 154.47     | -7.0                    | 4.4        |
| Dairy products .....                  |  | 204.98                  | 203.19                 | 3/197.18                | 173.33     | .9                      | 4.0        | 98.17                            | 3/97.20       | 94.20                   | 77.85      | 1.0                     | 4.2        |
| Poultry and eggs .....                |  | 91.58                   | 88.42                  | 79.96                   | 93.02      | 3.6                     | 14.5       | 50.52                            | 49.93         | 40.14                   | 56.28      | 1.2                     | 25.9       |
| Bakery and cereal products 5/         |  |                         |                        |                         |            |                         |            |                                  |               |                         |            |                         |            |
| All ingredients .....                 | Average quantities purchased per urban wage-earner and | 171.14                  | 170.20                 | 168.93                  | 148.40     | .6                      | 1.3        | 32.36                            | 3/32.21       | 33.55                   | 30.55      | .5                      | -3.5       |
| Grain .....                           | clerical-  | ---                     | ---                    | ---                     | ---        | ---                     | ---        | 24.66                            | 24.60         | 26.00                   | 23.40      | .2                      | -5.2       |
| All fruits and vegetables .....       | worker   | 245.54                  | 252.00                 | 229.68                  | 202.96     | -2.6                    | 6.9        | 64.42                            | 3/64.74       | 58.08                   | 50.05      | -.5                     | 10.9       |
| Fresh fruits and vegetables ..        | household  | 121.90                  | 128.17                 | 111.16                  | 91.15      | -4.9                    | 9.7        | 39.51                            | 3/39.41       | 35.56                   | 28.70      | .3                      | 11.1       |
| Fresh fruits .....                    | in   | 51.00                   | 57.92                  | 45.41                   | 36.26      | -11.9                   | 12.3       | 16.26                            | 3/18.13       | 14.98                   | 12.26      | -10.3                   | 8.5        |
| Fresh vegetables .....                | 1960-61  | 70.90                   | 70.25                  | 65.75                   | 54.89      | .9                      | 7.8        | 23.25                            | 3/21.28       | 20.58                   | 16.44      | 9.3                     | 13.0       |
| Processed fruits and vegetables ..... |  | 123.64                  | 123.83                 | 118.52                  | 111.81     | -.2                     | 4.3        | 24.91                            | 3/25.33       | 22.52                   | 21.35      | -1.7                    | 10.6       |
| Fats and oils .....                   |  | 37.92                   | 37.90                  | 38.38                   | 37.56      | .1                      | -1.2       | 9.38                             | 9.19          | 10.14                   | 11.19      | 2.1                     | -7.5       |
| Miscellaneous products .....          |  | 49.71                   | 49.20                  | 48.66                   | 42.33      | 1.0                     | 2.2        | 9.46                             | 3/9.36        | 9.30                    | 7.48       | 1.1                     | 1.7        |
|                                       |  | Cents                   | Cents                  | Cents                   | Cents      | Percent                 | Percent    | Cents                            | Cents         | Cents                   | Cents      | Percent                 | Percent    |
| Beef, Choice grade .....              | Pound  | 88.2                    | 87.8                   | 86.0                    | 78.1       | .5                      | 2.6        | 52.3                             | 53.5          | 49.7                    | 48.3       | -2.2                    | 5.2        |
| Lamb, Choice grade .....              | Pound  | 93.9                    | 3/93.6                 | 3/90.1                  | 70.0       | .3                      | 4.2        | 51.7                             | 51.1          | 46.5                    | 40.2       | 1.2                     | 11.2       |
| Pork .....                            | Pound  | 67.5                    | 68.0                   | 66.5                    | 60.5       | -.7                     | 1.5        | 36.2                             | 37.5          | 32.1                    | 31.0       | -3.5                    | 12.8       |
| Butter .....                          | Pound  | 83.8                    | 83.5                   | 83.2                    | 73.2       | .4                      | .7         | 60.0                             | 60.5          | 60.8                    | 52.6       | -.8                     | -1.3       |
| Cheese, American process .....        | 1/2 pound  | 45.1                    | 44.8                   | 43.5                    | 32.3       | .7                      | 3.7        | 19.8                             | 19.5          | 18.6                    | 14.2       | 1.5                     | 6.5        |
| Ice cream .....                       | 1/2 gallon   | 81.1                    | 80.7                   | 80.2                    | 84.2       | .5                      | 1.1        | 26.4                             | 26.2          | 25.6                    | 21.0       | .8                      | 3.1        |
| Milk, evaporated .....                | 14 1/2-ounce can                                       | 17.4                    | 17.3                   | 16.8                    | 14.5       | .6                      | 3.6        | 8.1                              | 8.2           | 7.8                     | 6.2        | -1.2                    | 3.8        |
| Milk, fresh .....                     |  |                         |                        |                         |            |                         |            |                                  |               |                         |            |                         |            |
| Home delivered .....                  | 1/2 gallon   | 61.3                    | 60.5                   | 57.7                    | 50.8       | 1.3                     | 6.2        | 27.3                             | 26.9          | 26.0                    | 21.9       | 1.5                     | 5.0        |
| Sold in stores .....                  | 1/2 gallon   | 54.6                    | 54.1                   | 52.4                    | 46.6       | .9                      | 4.2        | 27.3                             | 26.9          | 26.0                    | 21.9       | 1.5                     | 5.0        |
| Chickens, frying, ready-to-cook ..    | Pound  | 39.4                    | 40.7                   | 37.2                    | 43.5       | -3.2                    | 5.9        | 18.2                             | 20.3          | 16.5                    | 24.4       | -10.3                   | 10.3       |
| Eggs, Grade A large .....             | Dozen  | 61.1                    | 55.0                   | 48.4                    | 56.2       | 11.1                    | 26.2       | 39.1                             | 35.3          | 27.6                    | 36.1       | 10.8                    | 41.7       |
| Bread, white .....                    |  |                         |                        |                         |            |                         |            |                                  |               |                         |            |                         |            |
| All ingredients .....                 | Pound  | 22.7                    | 22.5                   | 22.2                    | 18.9       | .9                      | 2.3        | 3.2                              | 3.2           | 3.3                     | 3.0        | 0                       | -3.0       |
| Wheat .....                           | Pound  | ---                     | ---                    | ---                     | ---        | ---                     | ---        | 2.5                              | 2.5           | 2.6                     | 2.4        | 0                       | -3.8       |
| Bread, whole or cracked wheat ..      | Pound  | 30.6                    | 30.2                   | 29.8                    | ---        | 1.3                     | 2.7        | 3.1                              | 3.1           | 3.2                     | ---        | 0                       | -3.1       |
| Cookies, cream filled .....           | Pound  | 50.8                    | 51.0                   | 51.6                    | ---        | -1.6                    | -1.6       | 4.4                              | 4.3           | 4.4                     | ---        | 2.3                     | 0          |
| Corn flakes .....                     | 12 ounces  | 31.3                    | 31.2                   | 31.3                    | 24.5       | .3                      | 0          | 2.3                              | 2.3           | 2.3                     | 2.4        | 0                       | 0          |
| Flour, white .....                    | 5 pounds   | 58.0                    | 58.3                   | 59.1                    | 53.3       | -.5                     | -1.9       | 20.0                             | 19.9          | 21.3                    | 18.8       | .5                      | -6.1       |
| Apples .....                          | Pound  | 21.1                    | 27.9                   | 18.7                    | 16.1       | -24.4                   | 12.8       | 8.3                              | 7.0           | 7.1                     | 5.0        | 18.6                    | 16.9       |
| Grapefruit .....                      | Each   | 17.8                    | 18.2                   | 14.2                    | 10.7       | -2.2                    | 25.4       | 3.7                              | 5.2           | 3.3                     | 2.7        | -28.8                   | 12.1       |
| Lemons .....                          | Pound  | 26.4                    | 25.9                   | 26.5                    | 18.4       | 1.9                     | -.4        | 6.2                              | 7.8           | 8.2                     | 4.2        | -20.5                   | -24.4      |
| Oranges .....                         | Dozen  | 101.4                   | 102.2                  | 86.6                    | 66.0       | -.8                     | 17.1       | 25.2                             | 37.1          | 20.9                    | 23.2       | -32.1                   | 20.6       |
| Cabbage .....                         | Pound  | 12.0                    | 11.1                   | 9.8                     | 8.7        | 8.1                     | 22.4       | 3.8                              | 3.6           | 2.6                     | 2.4        | 5.6                     | 46.2       |
| Carrots .....                         | Pound  | 15.8                    | 16.8                   | 18.4                    | 14.5       | -6.0                    | -14.1      | 5.2                              | 5.2           | 8.3                     | 3.7        | 0                       | -37.3      |
| Celery .....                          | Pound  | 15.7                    | 17.1                   | 17.3                    | 15.3       | -8.2                    | -9.2       | 4.2                              | 4.5           | 5.5                     | 4.4        | -6.7                    | -23.6      |
| Cucumbers .....                       | Pound  | 27.2                    | 19.5                   | 21.1                    | ---        | 39.5                    | 28.9       | 15.7                             | 6.9           | 6.3                     | ---        | 127.5                   | 149.2      |
| Lettuce .....                         | Head   | 29.8                    | 26.9                   | 27.3                    | 22.6       | 10.8                    | 9.2        | 10.8                             | 8.9           | 9.3                     | 6.0        | 21.3                    | 16.1       |
| Onions .....                          | Pound  | 13.5                    | 14.9                   | 12.8                    | 10.1       | -9.4                    | 5.5        | 3.7                              | 4.4           | 4.3                     | 3.4        | -15.9                   | -14.0      |
| Peppers, green .....                  | Pound  | 35.5                    | 34.0                   | 37.1                    | ---        | 4.4                     | -4.3       | 12.7                             | 10.6          | 15.4                    | ---        | 19.8                    | -17.5      |
| Potatoes .....                        | 10 pounds  | 74.0                    | 83.3                   | 69.5                    | 58.3       | -11.2                   | 6.5        | 20.2                             | 3/23.2        | 17.4                    | 17.8       | -12.9                   | 16.1       |
| Spinach .....                         | 10 ounces  | 32.3                    | 31.5                   | 30.1                    | ---        | 2.5                     | 7.3        | 6.7                              | 8.3           | 7.1                     | ---        | -19.3                   | -5.6       |
| Tomatoes .....                        | Pound  | 40.9                    | 33.6                   | 31.7                    | 30.1       | 21.7                    | 29.0       | 15.8                             | 11.4          | 9.7                     | 10.6       | 38.6                    | 62.9       |
| Peaches, canned .....                 | No. 2 1/2 can  | 34.9                    | 35.9                   | 32.9                    | 34.3       | -2.8                    | 6.1        | 6.0                              | 6.3           | 6.7                     | 6.1        | -4.8                    | -10.4      |
| Pears, canned .....                   | No. 2 1/2 can  | 51.8                    | 54.1                   | 50.4                    | ---        | -4.3                    | 2.8        | 10.2                             | 13.0          | 15.9                    | ---        | -21.5                   | -35.1      |
| Beets, canned .....                   | No. 303 can  | 18.7                    | 18.5                   | 18.1                    | ---        | 1.1                     | 3.3        | 1.4                              | 1.3           | 1.3                     | ---        | 7.7                     | 7.7        |
| Corn, canned .....                    | No. 303 can  | 24.3                    | 24.5                   | 23.6                    | 17.8       | -.8                     | 3.0        | 3.0                              | 3.0           | 3.0                     | 2.4        | 0                       | 0          |
| Peas, canned .....                    | No. 303 can  | 24.8                    | 24.9                   | 25.0                    | 21.0       | -.4                     | -.8        | 3.8                              | 3.8           | 3.8                     | 3.1        | 0                       | 0          |
| Tomatoes, canned .....                | No. 303 can  | 20.0                    | 20.5                   | 20.2                    | 15.6       | -2.4                    | -1.0       | 3.7                              | 3.9           | 3.9                     | 2.3        | -5.1                    | -5.1       |
| Orange juice concentrate, frozen      | 6-ounce can  | 22.2                    | 21.5                   | 18.3                    | 23.4       | 3.3                     | 21.3       | 9.6                              | 9.6           | 4.5                     | 8.2        | 0                       | 113.3      |
| French fried potatoes, frozen ..      | 9 ounces   | 15.7                    | 15.5                   | 15.0                    | ---        | 1.3                     | 4.7        | 2.4                              | 2.1           | 2.2                     | ---        | 14.3                    | 9.1        |
| Peas, frozen .....                    | 10 ounces  | 20.8                    | 20.9                   | 20.5                    | 19.9       | -.5                     | 1.5        | 3.6                              | 3/3.6         | 3.7                     | 3.2        | 0                       | -2.7       |
| Beans, dried .....                    | Pound  | 19.9                    | 19.6                   | 18.8                    | 16.3       | 1.5                     | 5.9        | 7.9                              | 8.7           | 8.3                     | 6.9        | -9.2                    | -4.8       |
| Margarine .....                       | Pound  | 27.7                    | 27.7                   | 28.1                    | 27.4       | 0                       | -1.4       | 6.4                              | 6.1           | 7.1                     | 7.8        | 4.9                     | -9.9       |
| Peanut butter .....                   | 12-ounce jar   | 44.7                    | 43.9                   | 43.9                    | 41.4       | 1.8                     | 1.8        | 16.0                             | 15.5          | 15.0                    | 14.1       | 3.2                     | 6.7        |
| Salad and cooking oil .....           | 24-ounce bottle  | 53.2                    | 52.9                   | 53.4                    | ---        | .6                      | -.4        | 10.7                             | 10.8          | 11.6                    | ---        | -.9                     | -7.8       |
| Vegetable shortening .....            | 3 pounds   | 83.0                    | 84.0                   | 85.8                    | 90.4       | -1.2                    | -3.3       | 22.2                             | 21.9          | 25.0                    | 28.2       | 1.4                     | -11.2      |
| Sugar .....                           | 5 pounds   | 61.1                    | 61.0                   | 60.9                    | 54.5       | .2                      | .3         | 25.1                             | 3/24.6        | 23.7                    | 20.2       | 2.0                     | 5.9        |
| Spaghetti with sauce, canned ..       | 15 1/2-ounce can                                       | 17.0                    | 16.7                   | 16.6                    | ---        | 1.8                     | 2.4        | 2.1                              | 2.1           | 2.2                     | ---        | 0                       | -4.5       |

1/ Product groups include more items than those listed in this table. For example, in addition to the products listed--Choice beef, lamb, and pork (major products except lard)--the meat products group includes lower grades of beef, the minor edible pork products, and veal.

2/ Gross farm value adjusted to exclude imputed value of byproducts obtained in processing.

3/ Most net farm value figures for October-December 1967, have been revised; figures in other columns revised as indicated.

4/ Less than 0.05 percent.

5/ For the bakery products group and the individual wheat products, the net farm value is based on the market price of wheat received by farmers plus the cost of the marketing certificate to millers. This cost equals the value of the domestic marketing certificate received by farmers complying fully with the Wheat Program.

Table 16.--Farm food products: Farm-retail spread and farmer's share of the retail cost, October-December 1968, July-September 1968, October-December 1967 and 1957-59 Average

| Product 1/                            | Retail unit                  | Farm-retail spread 2/ |           |          |                    |                        | Farmer's share        |          |           |          |         |
|---------------------------------------|------------------------------|-----------------------|-----------|----------|--------------------|------------------------|-----------------------|----------|-----------|----------|---------|
|                                       |                              | October-              | July-     | October- | 1957-59<br>average | Percentage change      |                       | October- | July-     | October- | 1957-59 |
|                                       |                              | December              | September | December |                    | Oct.-Dec. 1968         |                       | December | September | December | average |
|                                       |                              | 1968                  | 1968      | 1967     |                    | July-<br>Sept.<br>1968 | Oct.-<br>Dec.<br>1967 | 1968     | 1968      | 1968     | average |
|                                       |                              | Dollars               | Dollars   | Dollars  | Dollars            | Percent                | Percent               | Percent  | Percent   | Percent  | Percent |
| Market basket .....                   |                              | 695.48                | 3/684.42  | 676.26   | 594.78             | 1.6                    | 2.8                   | 38       | 39        | 3/38     | 39      |
| Meat products .....                   |                              | 158.92                | 3/146.14  | 158.88   | 130.58             | 8.7                    | 4/                    | 51       | 55        | 50       | 54      |
| Dairy products .....                  | Average quantities purchased | 106.81                | 3/105.99  | 102.98   | 95.48              | .8                     | 3.7                   | 48       | 48        | 48       | 45      |
| Poultry and eggs .....                | per urban wage-earner and    | 41.06                 | 38.49     | 39.82    | 36.74              | 6.7                    | 3.1                   | 55       | 56        | 50       | 61      |
| Bakery and cereal products 3/ ..      | clerical-worker              | 138.78                | 3/137.99  | 135.38   | 117.85             | .6                     | 2.5                   | 19       | 19        | 20       | 21      |
| All ingredients .....                 | household                    | --                    | --        | --       | --                 | --                     | --                    | 14       | 14        | 15       | 16      |
| Grain .....                           | in                           | 181.12                | 3/187.26  | 171.60   | 152.91             | -3.3                   | 5.5                   | 26       | 26        | 25       | 25      |
| All fruits and vegetables .....       | 1960-61                      | 82.39                 | 3/88.76   | 75.60    | 62.45              | -7.2                   | 9.0                   | 32       | 31        | 32       | 31      |
| Fresh fruits and vegetables ..        |                              | 34.74                 | 39.79     | 30.43    | 24.00              | -12.7                  | 14.2                  | 32       | 31        | 33       | 34      |
| Fresh fruits .....                    |                              | 47.65                 | 3/48.97   | 45.17    | 38.45              | -2.7                   | 5.5                   | 33       | 3/30      | 31       | 30      |
| Fresh vegetables .....                |                              | 98.73                 | 3/98.50   | 96.00    | 90.46              | .2                     | 2.8                   | 20       | 20        | 19       | 19      |
| Processed fruits and vegetables ..... |                              | 28.54                 | 28.71     | 28.24    | 26.37              | -.6                    | 1.1                   | 25       | 24        | 26       | 30      |
| Fats and oils .....                   |                              | 40.25                 | 3/39.84   | 39.36    | 34.85              | 1.0                    | 2.3                   | 19       | 19        | 19       | 18      |
| Miscellaneous products .....          |                              |                       |           |          |                    |                        |                       |          |           |          |         |
|                                       |                              | Cents                 | Cents     | Cents    | Cents              | Percent                | Percent               | Percent  | Percent   | Percent  | Percent |
| Beef, Choice grade .....              | Pound                        | 35.9                  | 34.3      | 36.3     | 29.8               | 4.7                    | -1.1                  | 59       | 61        | 58       | 62      |
| Lamb, Choice grade .....              | Pound                        | 42.2                  | 3/42.5    | 42.6     | 29.8               | -.7                    | -3.2                  | 55       | 55        | 52       | 57      |
| Pork .....                            | Pound                        | 34.9                  | 30.5      | 34.4     | 29.5               | 14.4                   | 1.5                   | 48       | 55        | 48       | 51      |
| Butter .....                          | Pound                        | 23.8                  | 23.0      | 22.4     | 20.6               | 3.5                    | 6.2                   | 72       | 72        | 73       | 72      |
| Cheese, American process .....        | 1/2 pound                    | 25.3                  | 25.3      | 24.9     | 18.1               | 0                      | 1.6                   | 44       | 44        | 43       | 44      |
| Ice cream .....                       | gallon                       | 54.7                  | 54.5      | 54.6     | 63.2               | .4                     | 1.2                   | 33       | 32        | 32       | 25      |
| Milk, evaporated .....                | 14 1/2-ounce can             | 9.3                   | 9.1       | 9.0      | 8.3                | 2.2                    | 3.3                   | 47       | 47        | 46       | 43      |
| Milk, fresh .....                     |                              |                       |           |          |                    |                        |                       |          |           |          |         |
| Home delivered .....                  | gallon                       | 34.0                  | 33.6      | 31.7     | 28.9               | 1.2                    | 7.3                   | 45       | 44        | 45       | 43      |
| Sold in stores .....                  | gallon                       | 27.3                  | 27.2      | 26.4     | 24.7               | .4                     | 3.4                   | 50       | 50        | 50       | 47      |
| Chickens, frying, ready-to-cook ..    | Pound                        | 21.2                  | 20.4      | 20.7     | 19.1               | 3.9                    | 2.4                   | 46       | 50        | 3/44     | 56      |
| Eggs, Grade A large .....             | Dozen                        | 22.0                  | 19.7      | 20.8     | 20.1               | 11.7                   | 5.8                   | 64       | 64        | 57       | 64      |
| Bread, white .....                    |                              |                       |           |          |                    |                        |                       |          |           |          |         |
| All ingredients .....                 | Pound                        | 19.5                  | 19.3      | 18.9     | 15.9               | 1.0                    | 3.2                   | 14       | 14        | 15       | 16      |
| Wheat .....                           | Pound                        | --                    | --        | --       | --                 | --                     | --                    | 11       | 11        | 12       | 13      |
| Bread, whole or cracked wheat ..      | Pound                        | 27.5                  | 27.1      | 26.6     | --                 | 1.5                    | 3.4                   | 10       | 10        | 11       | --      |
| Cookies, cream filled .....           | Pound                        | 46.4                  | 46.7      | 47.2     | --                 | -.6                    | -1.7                  | 9        | 3/9       | 9        | --      |
| Corn flakes .....                     | 12 ounces                    | 29.0                  | 28.9      | 29.0     | 22.1               | .3                     | 0                     | 7        | 7         | 7        | 10      |
| Flour, white .....                    | 5 pounds                     | 38.0                  | 38.4      | 37.8     | 34.5               | -1.0                   | .5                    | 34       | 34        | 36       | 35      |
| Apples .....                          | Pound                        | 12.8                  | 20.9      | 11.6     | 11.1               | -38.8                  | 10.3                  | 39       | 25        | 3/38     | 31      |
| Grapefruit .....                      | Each                         | 14.1                  | 13.0      | 10.9     | 8.0                | 8.5                    | 29.4                  | 21       | 29        | 23       | 25      |
| Lemons .....                          | Pound                        | 20.2                  | 18.1      | 18.3     | 14.2               | 11.6                   | 10.4                  | 23       | 30        | 31       | 23      |
| Oranges .....                         | Dozen                        | 76.2                  | 65.1      | 65.7     | 42.8               | 17.1                   | 16.0                  | 25       | 36        | 24       | 35      |
| Cabbage .....                         | Pound                        | 8.2                   | 7.5       | 7.2      | 6.3                | 9.3                    | 13.9                  | 32       | 32        | 27       | 28      |
| Carrots .....                         | Pound                        | 10.6                  | 11.6      | 10.1     | 10.8               | -8.6                   | 5.0                   | 33       | 31        | 45       | 26      |
| Celery .....                          | Pound                        | 11.5                  | 12.6      | 11.8     | 10.9               | -8.7                   | -2.5                  | 27       | 26        | 32       | 29      |
| Cucumbers .....                       | Pound                        | 11.5                  | 12.6      | 14.8     | --                 | -8.7                   | -22.3                 | 58       | 35        | 30       | --      |
| Lettuce .....                         | Head                         | 19.0                  | 18.0      | 18.0     | 16.6               | 5.6                    | 5.6                   | 36       | 33        | 34       | 27      |
| Onions .....                          | Pound                        | 9.8                   | 10.5      | 8.5      | 6.7                | -6.7                   | 15.3                  | 27       | 30        | 34       | 34      |
| Peppers, green .....                  | Pound                        | 22.8                  | 23.4      | 21.7     | --                 | -2.6                   | 5.1                   | 36       | 31        | 42       | --      |
| Potatoes .....                        | 10 pounds                    | 53.8                  | 3/60.1    | 52.1     | 40.5               | -10.5                  | 3.3                   | 27       | 3/28      | 25       | 31      |
| Spinach .....                         | 10 ounces                    | 25.6                  | 23.2      | 23.0     | --                 | 10.3                   | 11.3                  | 21       | 26        | 24       | --      |
| Tomatoes .....                        | Pound                        | 25.1                  | 22.2      | 22.0     | 19.5               | 13.1                   | 14.1                  | 39       | 34        | 31       | 35      |
| Peaches, canned .....                 | No. 2 1/2 can                | 28.9                  | 29.6      | 26.2     | 28.2               | -2.4                   | 10.3                  | 17       | 18        | 20       | 18      |
| Pears, canned .....                   | No. 2 1/2 can                | 41.6                  | 41.1      | 34.5     | --                 | 1.2                    | 20.6                  | 20       | 24        | 3/32     | --      |
| Beets, canned .....                   | No. 303 can                  | 17.3                  | 17.2      | 16.8     | --                 | .6                     | 3.0                   | 7        | 7         | 7        | --      |
| Corn, canned .....                    | No. 303 can                  | 21.3                  | 21.5      | 20.6     | 15.4               | -.9                    | 3.4                   | 12       | 13        | 3/13     | 13      |
| Peas, canned .....                    | No. 303 can                  | 21.0                  | 21.1      | 21.2     | 17.9               | -.5                    | -.9                   | 15       | 15        | 15       | 15      |
| Tomatoes, canned .....                | No. 303 can                  | 16.3                  | 16.6      | 16.3     | 13.3               | -1.8                   | 0                     | 18       | 19        | 19       | 15      |
| Orange juice concentrate, frozen      | 6-ounce can                  | 12.6                  | 11.9      | 13.8     | 15.2               | 5.9                    | -8.7                  | 43       | 45        | 25       | 35      |
| French fried potatoes, frozen ..      | 9 ounces                     | 13.3                  | 13.4      | 12.8     | --                 | -.7                    | 3.9                   | 15       | 14        | 15       | --      |
| Peas, frozen .....                    | 10 ounces                    | 17.2                  | 3/17.3    | 16.8     | 16.7               | -.6                    | 2.4                   | 17       | 3/17      | 18       | 16      |
| Beans, dried .....                    | Pound                        | 12.0                  | 10.9      | 10.5     | 9.4                | 10.1                   | 14.3                  | 40       | 44        | 44       | 42      |
| Margarine .....                       | Pound                        | 21.3                  | 21.6      | 21.0     | 19.6               | -1.4                   | 1.4                   | 23       | 22        | 25       | 28      |
| Peanut butter .....                   | 12-ounce jar                 | 28.7                  | 28.4      | 28.9     | 27.3               | 1.1                    | -.7                   | 36       | 35        | 34       | 34      |
| Salad and cooking oil .....           | 24-ounce bottle              | 42.5                  | 42.1      | 41.8     | --                 | 1.0                    | 1.7                   | 20       | 20        | 22       | --      |
| Vegetable shortening .....            | 3 pounds                     | 60.8                  | 62.1      | 60.8     | 62.2               | -2.1                   | 0                     | 27       | 26        | 29       | 31      |
| Sugar .....                           | 5 pounds                     | 36.0                  | 3/36.4    | 37.2     | 34.3               | -1.1                   | -3.2                  | 41       | 3/40      | 3/39     | 37      |
| Spaghetti with sauce, canned .....    | 15 1/2-ounce can             | 14.9                  | 14.6      | 14.4     | --                 | 2.1                    | 3.5                   | 12       | 13        | 13       | --      |

1/ Product groups include more items than those listed in this table. For example, in addition to the products listed--Choice beef, lamb, and pork (major products except lard)--the meat products group includes lower grades of beef, the minor edible pork products, and veal.

2/ The farm-retail spread is the difference between the retail cost and the net farm value shown in table on opposite page.

3/ Most farm-retail spread figures for October-December 1967, have been revised; figures in other columns revised as indicated.

4/ Less than 0.05 percent.

5/ For the bakery products group and the individual wheat products, the farmer's share is based on the market price of wheat received by farmers plus the cost of the marketing certificate to millers. This cost is returned to farmers complying with the Wheat Program.



Table 17.--Farm food products: Retail cost, farm value of equivalent quantities sold by producers, byproduct allowance, farm-retail spread, and farmer's share of retail cost, annual 1967

| Product 1/                            | Farm product equivalent                    | Retail unit  | Retail cost | Cross farm value | Byproduct allowance | Net farm value 2/ | Farm-retail spread | Farmer's share |
|---------------------------------------|--|--|-------------|------------------|---------------------|-------------------|--------------------|----------------|
|                                       |  |  | Dollars     | Dollars          | Dollars             | Dollars           | Dollars            | Percent        |
| Market basket .....                   |  |  | 1,079.88    | --               | --                  | 414.06            | 665.82             | 38             |
| Meat products .....                   |  |  | 317.08      | --               | --                  | 165.59            | 151.49             | 52             |
| Dairy products .....                  |  |  | 195.65      | --               | --                  | 93.26             | 102.39             | 48             |
| Poultry and eggs .....                |  | Average quantities purchased                                   | 81.55       | --               | --                  | 43.21             | 38.34              | 53             |
| Bakery and cereal products 3/         | Farm produce equivalent to products bought | per urban wage-earner and clerical-worker household in 1960-61 | 169.09      | --               | --                  | 34.99             | 134.10             | 21             |
| All ingredients                       |  |  | --          | 32.82            | 5.69                | 27.13             | --                 | 16             |
| Crain .....                           |  |  | 229.44      | --               | --                  | 56.92             | 172.52             | 25             |
| All fruits and vegetables .....       |  |  | 113.24      | --               | --                  | 35.69             | 77.55              | 32             |
| Fresh fruits and vegetables .....     |  |  | 44.72       | --               | --                  | 13.76             | 30.96              | 31             |
| Fresh fruits .....                    |  |  | 68.52       | --               | --                  | 21.93             | 46.59              | 32             |
| Fresh vegetables .....                |  |  | 116.20      | --               | --                  | 21.23             | 94.97              | 18             |
| Processed fruits and vegetables ..... |  |  | 38.79       | --               | --                  | 11.00             | 27.79              | 28             |
| Fats and oils .....                   |  |  | 48.28       | --               | --                  | 9.09              | 39.19              | 19             |
| Miscellaneous products .....          |  |  |             |                  |                     |                   |                    |                |
|                                       |  |  | Cents       | Cents            | Cents               | Cents             | Cents              | Percent        |
| Beef, Choice grade .....              | 2.25 lb. Choice grade cattle               | Pound  | 84.1        | 54.3             | 5.0                 | 49.3              | 34.8               | 59             |
| Lamb, Choice grade .....              | 2.35 lb. lamb                              | Pound  | 87.3        | 52.2             | 5.7                 | 46.5              | 40.8               | 53             |
| Pork .....                            | 2.00 lb. hogs                              | Pound  | 67.0        | 39.0             | 4.7                 | 34.3              | 32.7               | 51             |
| Butter .....                          | Cream and whole milk                       | Pound  | 83.1        | 92.7             | 31.8                | 60.9              | 22.2               | 73             |
| Cheese, American process .....        | Milk for American cheese                   | $\frac{1}{2}$ pound  | 43.6        | 19.5             | .8                  | 18.7              | 24.9               | 43             |
| Ice cream .....                       | Cream, milk, and sugar                     | $\frac{1}{2}$ gallon   | 81.0        | --               | --                  | 25.6              | 55.4               | 32             |
| Milk, evaporated .....                | Milk for evaporating                       | $1\frac{1}{2}$ -ounce can                                      | 16.9        | 8.1              | .2                  | 7.9               | 9.0                | 47             |
| Milk, fresh                           |  |  |             |                  |                     |                   |                    |                |
| Home delivered .....                  | 4.39 lb. Class I milk                      | $\frac{1}{2}$ gallon   | 56.8        | --               | --                  | 25.5              | 31.3               | 45             |
| Sold in stores .....                  | 4.39 lb. Class I milk                      | $\frac{1}{2}$ gallon   | 51.6        | --               | --                  | 25.5              | 26.1               | 49             |
| Chickens, frying, ready-to-cook ..... | 1.37 lb. broiler                           | Pound  | 38.1        | --               | --                  | 18.3              | 19.8               | 48             |
| Eggs, Grade A large .....             | 1.03 dozen                                 | Dozen  | 49.2        | --               | --                  | 29.0              | 20.2               | 59             |
| Bread, white                          |  |  |             |                  |                     |                   |                    |                |
| All ingredients .....                 | Wheat and other ingredients                | Pound  | 22.2        | --               | --                  | 3.4               | 18.8               | 15             |
| Wheat .....                           | .877 lb. wheat                             | Pound  | --          | 3.2              | .4                  | 2.8               | --                 | 13             |
| Bread, whole or cracked wheat .....   | Wheat and other ingredients                | Pound  | 29.7        | --               | --                  | 3.3               | 26.4               | 11             |
| Cookies, cream filled .....           | Wheat and other ingredients                | Pound  | 51.5        | --               | --                  | 4.5               | 47.0               | 9              |
| Corn flakes .....                     | 2.87 lb. yellow corn                       | 12 ounces  | 31.3        | 4/ 6.2           | 4/ 3.5              | 4/ 2.7            | 28.6               | 9              |
| Flour, white .....                    | 6.8 lb. wheat                              | 5 pounds   | 59.6        | 25.3             | 3.2                 | 22.1              | 37.5               | 37             |
| Apples .....                          | 1.04 lb. apples                            | Pound  | 20.5        | --               | --                  | 6.9               | 13.6               | 34             |
| Crapefruit .....                      | 1.03 grapefruit                            | Each   | 13.4        | --               | --                  | 2.9               | 10.5               | 22             |
| Lemons .....                          | 1.04 lb. lemons                            | Pound  | 24.5        | --               | --                  | 7.0               | 17.5               | 29             |
| Oranges .....                         | 1.03 doz. oranges                          | Dozen  | 76.6        | --               | --                  | 18.0              | 58.6               | 23             |
| Cabbage .....                         | 1.08 lb. cabbage                           | Pound  | 11.1        | --               | --                  | 3.2               | 7.9                | 29             |
| Carrots .....                         | 1.03 lb. carrots                           | Pound  | 16.2        | --               | --                  | 5.9               | 10.3               | 36             |
| Celery .....                          | 1.08 lb. celery                            | Pound  | 16.4        | --               | --                  | 5.4               | 11.0               | 33             |
| Cucumbers .....                       | 1.09 lb. cucumbers                         | Pound  | 23.8        | --               | --                  | 8.8               | 15.0               | 37             |
| Lettuce .....                         | 1.88 lb. lettuce                           | Head   | 27.7        | --               | --                  | 9.3               | 18.4               | 34             |
| Onions .....                          | 1.06 lb. onions                            | Pound  | 13.7        | --               | --                  | 4.8               | 8.9                | 35             |
| Peppers, green .....                  | 1.09 lb. peppers                           | Pound  | 37.5        | --               | --                  | 14.0              | 23.5               | 37             |
| Potatoes .....                        | 10.42 lb. potatoes                         | 10 pounds  | 74.4        | --               | --                  | 21.0              | 53.4               | 28             |
| Spinach .....                         | .71 lb. spinach                            | 10 ounces  | 30.2        | --               | --                  | 7.4               | 22.8               | 25             |
| Tomatoes .....                        | 1.18 lb. tomatoes                          | Pound  | 35.2        | --               | --                  | 11.8              | 23.4               | 34             |
| Peaches, canned .....                 | 1.60 lb. Calif. cling peaches              | No. 2 $\frac{1}{2}$ can  | 31.8        | --               | --                  | 6.0               | 25.8               | 19             |
| Pears, canned .....                   | 1.85 lb. pears for canning                 | No. 2 $\frac{1}{2}$ can  | 45.4        | --               | --                  | 10.5              | 34.9               | 23             |
| Beets, canned .....                   | 1.24 lb. beets for canning                 | No. 303 can  | 17.8        | --               | --                  | 1.2               | 16.6               | 7              |
| Corn, canned .....                    | 2.495 lb. sweet corn                       | No. 303 can  | 23.0        | --               | --                  | 2.8               | 20.2               | 12             |
| Peas, canned .....                    | .69 lb. peas for canning                   | No. 303 can  | 24.9        | --               | --                  | 3.8               | 21.1               | 15             |
| Tomatoes, canned .....                | 1.84 lb. tomatoes for canning              | No. 303 can  | 19.5        | --               | --                  | 3.5               | 16.0               | 18             |
| Orange juice concentrate, frozen ..   | 3.20 lb. oranges                           | 6-ounce can  | 18.3        | --               | --                  | 4.9               | 13.4               | 27             |
| French fried potatoes, frozen .....   | 1.38 lb. potatoes                          | 9 ounces   | 15.0        | --               | --                  | 2.3               | 12.7               | 15             |
| Peas, frozen .....                    | .70 lb. peas for freezing                  | 10 ounces  | 20.5        | --               | --                  | 3.5               | 17.0               | 17             |
| Beans, dried .....                    | 1.00 lb. Mich. dry beans                   | Pound  | 18.2        | --               | --                  | 7.0               | 11.2               | 38             |
| Margarine .....                       | Soybeans, cottonseed, and milk             | Pound  | 28.3        | 20.8             | 13.0                | 7.8               | 20.5               | 28             |
| Peanut butter .....                   | 1.33 lb. peanuts                           | 12-ounce jar   | 44.1        | --               | --                  | 15.1              | 29.0               | 34             |
| Salad and cooking oil .....           | Soybeans, cottonseed, and corn             | 24-ounce bottle  | 54.2        | 46.3             | 33.5                | 12.8              | 41.4               | 24             |
| Vegetable shortening .....            | Soybeans and cottonseed                    | 3 pounds   | 87.5        | 73.6             | 46.0                | 27.6              | 59.9               | 32             |
| Sugar .....                           | Sugar beets and cane                       | 5 pounds   | 60.6        | 24.6             | 1.5                 | 5/ 23.1           | 5/ 37.5            | 5/ 38          |
| Spaghetti with sauce, canned .....    | Wheat, tomatoes, cheese, sugar             | 15 $\frac{1}{2}$ -ounce can                                    | 16.4        | --               | --                  | 2.1               | 14.3               | 13             |

1/ Product groups include more items than those listed in this table. For example, in addition to the products listed--Choice beef, lamb, and pork (major products except lard)--the meat products group includes lower grades of beef, the minor edible pork products, and veal.

2/ Cross farm value adjusted to exclude imputed values of byproducts obtained in processing.

3/ For the bakery products group and the individual wheat products, gross farm value, byproduct allowance, net farm value, and farmer's share are based on the market price of wheat received by farmers plus the cost of the marketing certificate to millers. This cost is returned to farmers complying with the Wheat Program.

4/ Based on market price of corn received by farmers; no allowance made for price support payment received by farmers who comply with the Federal Feed Grain Program.

5/ Net farm value adjusted for Government payments to producers was 26.9 cents, farm-retail spread adjusted for Government processor tax was 34.8 cents, farmer's share of retail cost based on adjusted farm value was 44 percent.



Table 18.--Farm food products: Retail cost, farm value of equivalent quantities sold by producers, byproduct allowance, farm-retail spread, and farmer's share of retail cost, annual 1968

| Product 1/                             | Farm product equivalent   | Retail unit   | Retail cost | Gross farm value | Byproduct allowance | Net farm value 2/ | Farm-retail spread | Farmer's share |
|--|---|---|-------------|------------------|---------------------|-------------------|--------------------|----------------|
|  |   |   | Dollars     | Dollars          | Dollars             | Dollars           | Dollars            | Percent        |
| Market basket .....                    |   |   | 1,117.71    | ---              | ---                 | 434.36            | 683.35             | 39             |
| Meat products .....                    |   |   | 324.22      | ---              | ---                 | 171.76            | 152.46             | 53             |
| Dairy products .....                   |   |   | 201.96      | ---              | ---                 | 96.54             | 105.42             | 48             |
| Poultry and eggs .....                 |   | Average quantities purchased per urban wage-earner and clerical-worker household in 1960-61 | 85.97       | ---              | ---                 | 46.96             | 39.01              | 55             |
| Bakery and cereal products 3/          | Farm produce equivalent to products bought per urban wage-earner and clerical-worker household in 1960-61 |   | 169.87      | ---              | ---                 | 33.04             | 136.83             | 19             |
| All ingredients .....                  |   |   | ---         | 30.47            | 5.09                | 25.38             | ---                | 15             |
| Grain .....                            |   |   | 248.46      | ---              | ---                 | 66.76             | 181.70             | 27             |
| All fruits and vegetables .....        |   |   | 125.49      | ---              | ---                 | 41.73             | 83.76              | 33             |
| Fresh fruits and vegetables .....      |   |   | 52.91       | ---              | ---                 | 17.88             | 35.03              | 34             |
| Fresh fruits .....                     |   |   | 72.58       | ---              | ---                 | 23.85             | 48.73              | 33             |
| Fresh vegetables .....                 |   |   | ---         | ---              | ---                 | ---               | ---                | ---            |
| Processed fruits and vegetables .....  |   |   | 122.97      | ---              | ---                 | 25.03             | 97.94              | 20             |
| Fats and oils .....                    |   |   | 38.04       | 27.23            | 17.38               | 9.87              | 28.17              | 26             |
| Miscellaneous products .....           |   |   | 49.19       | ---              | ---                 | 9.43              | 39.76              | 19             |
|  |   |   | Cents       | Cents            | Cents               | Cents             | Cents              | Percent        |
| Beef, Choice grade .....               | 2.25 lb. Choice grade cattle  | Pound   | 87.2        | 57.5             | 5.1                 | 52.4              | 34.8               | 60             |
| Lamb, Choice grade .....               | 2.35 lb. lamb   | Pound   | 92.8        | 57.2             | 6.1                 | 51.1              | 41.7               | 55             |
| Pork .....                             | 2.00 lb. hogs   | Pound   | 67.0        | 38.3             | 4.3                 | 34.0              | 33.0               | 51             |
| Butter .....                           | Cream and whole milk  | Pound   | 83.6        | 96.7             | 36.3                | 60.4              | 23.2               | 72             |
| Cheese, American process .....         | Milk for American cheese  | $\frac{1}{2}$ pound   | 44.4        | 20.2             | .8                  | 19.4              | 25.0               | 44             |
| Ice cream .....                        | Cream, milk, and sugar  | $\frac{1}{2}$ gallon  | 80.7        | ---              | ---                 | 26.2              | 54.5               | 32             |
| Milk, evaporated .....                 | Milk for evaporating  | $1\frac{1}{2}$ -ounce can   | 17.1        | 8.4              | .2                  | 8.2               | 8.9                | 48             |
| Milk, fresh                            |   |   |             |                  |                     |                   |                    |                |
| Home delivered .....                   | 4.39 lb. Class I milk   | $\frac{1}{2}$ gallon  | 60.0        | ---              | ---                 | 26.6              | 33.4               | 44             |
| Sold in stores .....                   | 4.39 lb. Class I milk   | $\frac{1}{2}$ gallon  | 53.7        | ---              | ---                 | 26.6              | 27.1               | 50             |
| Chickens, frying, ready-to-cook .....  | 1.37 lb. broiler  | Pound   | 39.8        | ---              | ---                 | 19.5              | 20.3               | 49             |
| Eggs, Grade A large .....              | 1.03 dozen  | Dozen   | 52.9        | ---              | ---                 | 32.4              | 20.5               | 61             |
| Bread, white                           |   |   |             |                  |                     |                   |                    |                |
| All ingredients .....                  | Wheat and other ingredients   | Pound   | 22.4        | ---              | ---                 | 3.3               | 19.1               | 15             |
| Wheat .....                            | .877 lb. wheat  | Pound   | ---         | 2.9              | .3                  | 2.6               | ---                | 12             |
| Bread, whole or cracked wheat .....    | Wheat and other ingredients   | Pound   | 30.0        | ---              | ---                 | 3.2               | 26.8               | 11             |
| Cookies, cream filled .....            | Wheat and other ingredients   | Pound   | 50.9        | ---              | ---                 | 4.4               | 46.5               | 9              |
| Corn flakes .....                      | 2.87 lb. yellow corn  | 12 ounces   | 31.2        | 4/5.5            | 4/3.1               | 4/2.4             | 28.8               | 8              |
| Flour, white .....                     | 6.8 lb. wheat   | 5 pounds  | 58.4        | 23.4             | 2.8                 | 20.6              | 37.8               | 35             |
| Apples .....                           | 1.04 lb. apples   | Pound   | 23.8        | ---              | ---                 | 8.6               | 15.2               | 36             |
| Grapefruit .....                       | 1.03 grapefruit   | Each  | 16.6        | ---              | ---                 | 4.1               | 12.5               | 25             |
| Lemons .....                           | 1.04 lb. lemons   | Pound   | 26.7        | ---              | ---                 | 7.7               | 19.0               | 29             |
| Oranges .....                          | 1.03 doz. oranges   | Dozen   | 96.6        | ---              | ---                 | 28.5              | 68.1               | 30             |
| Cabbage .....                          | 1.08 lb. cabbage  | Pound   | 12.0        | ---              | ---                 | 3.7               | 8.3                | 31             |
| Carrots .....                          | 1.03 lb. carrots  | Pound   | 18.7        | ---              | ---                 | 6.5               | 12.2               | 35             |
| Celery .....                           | 1.08 lb. celery   | Pound   | 16.8        | ---              | ---                 | 5.1               | 11.7               | 30             |
| Cucumbers .....                        | 1.09 lb. cucumbers  | Pound   | 27.2        | ---              | ---                 | 11.8              | 15.4               | 43             |
| Lettuce .....                          | 1.88 lb. lettuce  | Head  | 27.5        | ---              | ---                 | 9.3               | 18.2               | 34             |
| Onions .....                           | 1.06 lb. onions   | Pound   | 15.0        | ---              | ---                 | 5.3               | 9.7                | 35             |
| Peppers, green .....                   | 1.09 lb. peppers  | Pound   | 39.7        | ---              | ---                 | 14.5              | 25.2               | 37             |
| Potatoes .....                         | 10.42 lb. potatoes  | 10 pounds   | 76.3        | ---              | ---                 | 21.2              | 55.1               | 28             |
| Spinach .....                          | .71 lb. spinach   | 10 ounces   | 31.5        | ---              | ---                 | 7.3               | 24.2               | 23             |
| Tomatoes .....                         | 1.18 lb. tomatoes   | Pound   | 40.2        | ---              | ---                 | 15.6              | 24.6               | 39             |
| Peaches, canned .....                  | 1.60 lb. Calif. cling peaches   | No. 2 $\frac{1}{2}$ can   | 35.2        | ---              | ---                 | 6.4               | 28.8               | 18             |
| Pears, canned .....                    | 1.85 lb. pears for canning  | No. 2 $\frac{1}{2}$ can   | 53.4        | ---              | ---                 | 13.8              | 39.6               | 26             |
| Beets, canned .....                    | 1.24 lb. beets for canning  | No. 303 can   | 18.4        | ---              | ---                 | 1.3               | 17.1               | 7              |
| Corn, canned .....                     | 2.495 lb. sweet corn  | No. 303 can   | 24.3        | ---              | ---                 | 3.0               | 21.3               | 12             |
| Peas, canned .....                     | .69 lb. peas for canning  | No. 303 can   | 24.9        | ---              | ---                 | 3.8               | 21.1               | 15             |
| Tomatoes, canned .....                 | 1.84 lb. tomatoes for canning   | No. 303 can   | 20.4        | ---              | ---                 | 3.8               | 16.6               | 19             |
| Orange juice concentrate, frozen ..... | 3.15 lb. oranges  | 6-ounce can   | 21.1        | ---              | ---                 | 9.0               | 12.1               | 43             |
| French fried potatoes, frozen .....    | 1.38 lb. potatoes   | 9 ounces  | 15.4        | ---              | ---                 | 2.1               | 13.3               | 14             |
| Peas, frozen .....                     | .70 lb. peas for freezing   | 10 ounces   | 20.8        | ---              | ---                 | 3.7               | 17.1               | 18             |
| Beans, dried .....                     | 1.00 lb. Mich. dry beans  | Pound   | 19.6        | ---              | ---                 | 8.4               | 11.2               | 43             |
| Margarine .....                        | Soybeans, cottonseed, and milk  | Pound   | 27.9        | 19.9             | 13.1                | 6.8               | 21.1               | 24             |
| Peanut butter .....                    | 1.33 lb. peanuts  | 12-ounce jar  | 44.0        | ---              | ---                 | 15.4              | 28.6               | 35             |
| Salad and cooking oil .....            | Soybeans, cottonseed, and corn  | 24-ounce bottle   | 53.1        | 43.1             | 31.6                | 11.5              | 41.6               | 22             |
| Vegetable shortening .....             | Soybeans and cottonseed   | 3 pounds  | 83.9        | 70.0             | 46.1                | 23.9              | 60.0               | 28             |
| Sugar .....                            | Sugar beets and cane  | 5 pounds  | 60.9        | 26.3             | 1.6                 | 5/24.7            | 5/36.2             | 5/41           |
| Spaghetti with sauce, canned .....     | Wheat, tomatoes, cheese, sugar  | 15 $\frac{1}{2}$ -ounce can   | 16.8        | ---              | ---                 | 2.2               | 14.6               | 13             |

1/ Product groups include more items than those listed in this table. For example, in addition to the products listed--Choice beef, lamb, and pork (major products except lard)--the meat products group includes lower grades of beef, the minor edible pork products, and veal.

2/ Gross farm value adjusted to exclude imputed values of byproducts obtained in processing.

3/ For bakery products group and the individual wheat products, gross farm value, byproduct allowance, net farm value, and farmer's share are based on the market price of wheat received by farmers plus the cost of the marketing certificate to millers. This cost is returned to farmers complying with the Wheat Program.

4/ Based on market price of corn received by farmers; no allowance made for price support payment received by farmers who comply with the Federal Feed Grain Program.

5/ Net farm value adjusted for Government payments to producers was 28.4 cents, farm-retail spread adjusted for Government processor tax was 33.5 cents, farmer's share of retail cost based on adjusted farm value was 47 percent.

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3. "Cotton Gin Operating Costs in West Texas," by Charles A. Wilmot, Dale L. Shaw, and Zolton M. Looney, U.S. Dept. Agr., Econ. Res. Ser., MRR-831, Nov. 1968.
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7. "Marketing Aids For the Cattle Feeder," by Richard J. Crom, U.S. Dept. Agr., Econ. Res. Ser., MRR-819, revised Jan. 1969.
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